

ART. XV.—*Revision of Australian Lepidoptera.*

Family GEOMETRIDAE.

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[Read 8th October, 1903.].

Since Mr. Edw. Meyrick published a revision of the Australian Geometridae a little more than a decade ago, the number of new species described has been very large, and the group appears to be relapsing into confusion. Even in the first sub-family, the Hydrimeninae, in which there have been fewer additions than in the others, the number of recognised species has in the present revision been increased by one-half, and there has been a corresponding increase in the number of synonyms. This must be my excuse for this attempt, which is of course very largely founded on Mr. Meyrick's work. I have however endeavoured to exercise my own judgment on as much of the material as has been accessible to me, and the few instances in which I have been led to different conclusions are indicated in the text. I have examined the types in the British Museum collection described by Walker, and those in the Rothschild collection described by Mr. Warren. Many of the latter I have been able to identify, but some are unknown to me, and the time at my disposal did not permit of a thorough structural examination. Mr. Lower has kindly lent me the types described by him in the first two sub-families, which has been a most valuable help. Dr. Lucas's species I have identified to the best of my ability.

The names which should be attached to some of the larger and most widely distributed genera still remain in doubt; and the question can only be adequately settled by an historical inquiry, for which I have not the opportunity. This state of things, though unfortunate, may not be an unmixed evil, if it leads the student to concentrate his attention on the definitions, which are the real genera, and not wholly on the names, which are merely their tickets or labels.

## Sub-family HYDRIOMENINAE.

With the exception of the genera *Gymnoscelis* and *Chloroclystis*, which are well represented in Queensland, and of the Indo-Malayan genus *Sauris*, this sub-family is almost entirely a temperate one, only a small minority of the species ranging into Southern Queensland. In Tasmania, Victoria, and the mountains of New South Wales there are numerous species especially of the large genus *Hydriomena*.

In the classification of the sub-family I have followed Mr. Meyrick for the most part, but have made use of a character pointed out by Sir George Hampson—the origin of vein 5 of the hind wings. This has introduced a difficulty, inasmuch as without an examination of the type species and an elaborate research through the older literature, both of which are impossible for me, I am not able to determine what generic names, among the many that offer themselves, should be applied to the groups so separated. I have therefore contented myself with dividing the genera *Eucymatoge*, *Hydriomena*, and *Xanthorhoe* into sections, and indicating in the following tabulation what I consider their natural arrangement. It will be comparatively easy at a later date to substitute generic names for these sections.

Most of the genera are more or less cosmopolitan. The small genera *Scotocyma*, *Anomocentris*, and *Diploctena* appear to be endemic.

I am particularly indebted to Mr. G. Lyell for examples of the Victorian species, both by gift and loan. Indeed, without his assistance I could hardly have undertaken this revision.

Mr. Lyell also, together with Mr. J. A. Kershaw, kindly identified for me five species described by Walker in his "Characters of Undescribed Lepidoptera Heterocera," from the types in the Melbourne Museum.

The aberrant genus *Cleptocosmia*, Warr., is not included in the following tabulation, but is given separately as an appendix to the sub-family.

*Tabulation of Genera.*

A.—Thorax and coxae not hairy beneath.

B.—Posterior tibiae without median spurs.

	PAGE
C.—Face smooth. Posterior tibiae in ♂	
, without terminal spurs - - -	1. Sauris 222
CC.—Face with cone of scales. Posterior tibiae in ♂ with terminal spurs.	
D.—Tongue present. Antennae in ♂ simple - - -	2. Gymnoscelis 224
DD.—Tongue absent. Antennae in ♂ pectinated - - -	18. Anomocentris 268
BB.—Posterior tibiae with median spurs.	
C.—Fore wings with areole single.	
D.—Fore wings with vein 11 running into 12.	
E.—Fore wing with vein 5 approximated at base to 4 - - -	7. Microdes 237
EE.—Fore wings with vein 5 widely separate from 4 - - -	3. Chloroclystis 228
DD.—Fore wings with vein 11 free.	
E.—Abdomen with small segmental crests.	
F.—Fore wings with tuft of raised scales in disc - - -	4. Mesoptila 235
FF.—Fore wings without tuft of raised scales - - -	5. Tephroclystia 235
EE.—Abdomen not crested.	
F.—Face smooth - - -	8. Euchoeca 239
FF.—Face with projecting scales.	
G.—Palpi ascending - - -	11. Scotocyma 245
GG.—Palpi porrect - - -	10. Scordylia 244
CC.—Fore wings with areole double.	
D.—Face smooth - - -	9. Asthena 240
DD.—Face with projecting scales.	
E.—Hind wing with vein 5 approximated at base to 6, discocellular straight.	
F.—Abdomen with segmental crests throughout	12. Eucymatoge (Sections I. and II.) 247

	PAGE
FF.—Abdomen not crested or at most with one or two basal crests only.	
G.—Antennae of ♂ simple, serrate or laminate.	
H.—Hind wings in ♂ with discal patch of modified scales - - - 17. <i>Melitulias</i>	267
HH.—Hind wings in ♂ without patch of modified scales - - - 16. <i>Hydriomena</i>	
	(Section I.) 252
GG.—Antennae of ♂ pectinate.	
H.—Antennae of ♂ with two pairs of pectinations on each segment - 19. <i>Diploctena</i>	269
HH.—Antennae of ♂ with one pair of pectinations on each segment 20. <i>Xanthorhoe</i>	
	(Section I.) 270
EE.—Hind wings with vein 5 from middle or below middle of discocellular, which is usually angled.	
F.—Abdomen with segmental crests throughout.	
G.—Hind wing of ♂ deeply incised near tornus - 6. <i>Mnesiloba</i>	236
GG.—Hind wing of ♂ not incised near tornus - - - 12. <i>Eucymatoge</i>	
	(Section III.) 250
FF.—Abdomen not crested, or at most with one or two basal crests only.	
G.—Antennae of ♂ not pectinate.	
H.—Hind wing of ♂ with one vein wanting.	
J.—Hind wing of ♂ with vein 4 absent 13. <i>Heterochasta</i>	250



	PAGE
JJ.—Hind wing of ♂ with vein 6 absent	14. Polyclysta 251
HH.—Hind wing of ♂ with all veins present.	
J.—Fore wing of ♂ with hairy groove on vein 1 - - -	15. Protaulaca 251
JJ.—Fore wing of ♂ with- out hairy groove on vein 1 . . .	16. Hydriomena (Sections II. and III.) 266
GG.—Antennae of ♂ pectinate	20. Xanthorhoe (Section II.) 274
AA.—Thorax and coxae densely hairy beneath	
B.—Fore wings with areole single - - -	21. Dasystemna 277
BB.—Fore wings with areole double - - -	22. Dasyuris 277

### Genus 1. Sauris.

Sauris, Gn. Lep. X., p. 361.

Face smooth. Palpi long, porrected, smooth-scaled. Antennae stout, laterally compressed, in ♂ very minutely ciliated. Posterior tibiae in ♂ without spurs, in ♀ with terminal spurs only. Fore wings with areole simple. Hind wings much distorted in ♂, in ♀ small, veins 3 and 4 stalked, 6 and 7 stalked, 8 anastomosing with cell to near end.

A remarkable genus of which the species appear to be very variable, and are best to be recognised by the extraordinarily complicated secondary sexual characters of the males.

Type.—*S. hirudinata*, Gn.

- |  |                     |
|--|---------------------|
| 1. Fore wing of ♂ incised at tornus - - -  | - <i>hirudinata</i> |
| Fore wing of ♂ not incised at tornus - - - | - <i>lichenias</i>  |

#### 1. SAURIS LICHENIAS.

*Remodes lichenias*, Meyr. P.L.S. N.S.W., 1890, p. 806.

♂ with forewing not distorted at tornus; hind wing with veins 3 and 6 absent, inner margin turned over towards base, forming a large oval vesicle; wing not otherwise distorted.

In the only ♂ I have seen the abdomen and hind legs are damaged.

Type in Coll. Meyrick. Q., Brisbane. N.S.W., Sydney.

## 2. SAURIS HIRUDINATA.

*Sauris hirudinata*, Gn. Lep. x., p. 362. Hmps. Moths Ind., iii., p. 410.

*Sauris remodesaria*, Wlk. Brit. Mus. Cat. xxiv., 1253.

*Sauris remodesaria*, Moore. Lep. Ceyl., iii., pl. 207, f. 3, s. 2.

*Sauris vetustata*, Wlk. Brit. Mus. Cat. xxxv., p. 1680.

*Remodes interruptata*, Moore. Lep. Atk., p. 270.

*Remodes triseriata*, Moore. Lep. Ceyl. iii., p. 485, pl. 207, f. 1, 4.

*Remodes elaica*, Meyr. Tr.E.S., 1886, p. 193.

*Remodes melanoceros*, Meyr. Tr.E.S., 1889, p. 481, P.L.S. N.S.W., 1890, p. 805.

*Remodes malaca*, Meyr. P.L.S. N.S.W., 1890, p. 804.

*Remodes cinerosa*, Warr. Nov. Zool., 1894, p. 397.

♂ with fore wing distorted at tornus, being incised immediately above tornus, with a fringe of dense hair on lower margin of incision, and with a fovea containing a curved tuft of hair immediately beneath tornus; hind wings much distorted, veins 3 and 6 absent, base of inner margin turned over to form a vesicle, surmounted by a membranous lid, mid-termen incised and several times folded, forming a deep fovea containing dark hair on under side; abdomen with a pair of lateral-pencil-like tufts near base; posterior tibiae with an outer tuft of hair at extremity.

*Var. vetustata*, from Brisbane. All green markings absent from head, body and fore wings, being replaced by grey, with dark fuscous lines on fore wings. This variety is so different in appearance that I should have regarded it as a distinct species if it were not that the secondary ♂ characters appear to agree accurately with the type form.

Swinhoe (Tr.E.S., 1902, p. 653) gives also *Remodes angulosa*, Warr (Nov. Zool., 1896, p. 382), and *Remodes cirrhigera*, Warr (Nov. Zool., 1897, p. 395), as synonyms.

N.Q., Townsville.

Q., Duaringa, Gympie, Brisbane, Stradbroke Island.

Also from New Guinea, Fiji, Java, Sumatra, Ceylon, India, and Africa.

### Genus 2. *Gymnoscelis*.

*Gymnoscelis*, Mabille. Ann. Soc. Ent. Fr. (4), vii., p. 656 (1867).

Face with short cone of scales. Palpi moderate, porrected, rough-scaled. Antennae in ♂ ciliated. Thorax glabrous beneath. Abdomen crested. Posterior tibiae in both sexes without median spurs. Fore wings with areole simple, 11 sometimes anastomosing with or running into 12. Hind wings with 8 anastomosing with cell from near base to beyond middle (Meyrick, Tr.E.S., 1892, p. 65).

Type.—*G. pumilata*, Hb., from Europe.

A small genus principally developed in the Indo-Malayan region. One species occurs in Europe, and Sir George Hampson records seven from India. The species are inconspicuous, and require careful discrimination.

- |  |           |          |
|--|-----------|----------|
| 1. Fore and hind wings with a whitish spot on middle of termen                   | - - - - - | coquina  |
| Fore and hind wings without whitish terminal spot                                | - - - - - | 2        |
| 2. Fore wings greenish   | - - - - - | erymna   |
| Fore wings not greenish  | - - - - - | 3        |
| 3. Hind wings with termen more or less projecting between veins 3 and 4          | - - - - - | 4        |
| Hind wings with termen rounded   | - - - - - | 5        |
| 4. Terminal projection slight, fore wings with a looped antemedian line          | - - - - - | acidna   |
| Terminal projection strongly marked, fore wings without a looped antemedian line | - - - - - | minima   |
| 5. Thorax with a dark fuscous, transverse, posterior bar                         | - - - - - | delocyma |
| Thorax without a dark transverse bar   | - - - - - | lophopus |

### 3. *Gymnoscelis lophopus*, n. sp.

[*λοφος* a crest, and *πους* a foot; with crested feet].

♂ ♀, 15-16 mm. Head whitish; lower margin of face mixed with fuscous. Palpi whitish, mixed with fuscous. Antennae

whitish. Thorax whitish; a blackish transverse bar across middle of patagia. Abdomen ochreous-whitish, mixed with fuscous; tuft in ♂ large, white. Legs whitish; anterior pair mixed with fuscous; in ♂ anterior femora are clothed with long whitish hairs beneath, anterior tibiae with a large tuft of grey hairs at base, directed backwards, middle and posterior tibiae with dense apical tufts of dark leaden-grey hairs. Fore wings elongate, triangular, costa slightly arched, apex round-pointed, termen scarcely rounded, oblique; 11 anastomosing with 12; whitish, with reddish-brown irroration more marked in ♀, rarely greenish tinged; a few scattered black scales; several suffused basal lines best marked on costa; antemedian line sharply defined posteriorly, from  $\frac{2}{5}$  costa to  $\frac{2}{5}$  dorsum, with a rounded angle above middle; median line faintly indicated; postmedian line sharply defined posteriorly from  $\frac{3}{5}$  costa to  $\frac{3}{4}$  dorsum, once or twice acutely dentate; an acutely dentate whitish subterminal line; an interrupted fuscous terminal line; cilia whitish. Hind wings with termen rounded; colour and markings as in fore wings, but antemedian line not angled, postmedian line darker, and subterminal line indistinct not dentate.

The ♂ of this species is readily recognised by its tufted tibiae. In this it agrees with *tibialis*, Moore, from India, the type of Moore's genus *Iramba*, but I do not consider these tufts to be of generic value.

Type in Coll. Turner.

N. Q., Townsville, in June and July, and again in February. Seven specimens received from Mr. F. P. Dodd, who has found the larvae on *Acacia aulacocarpa*; Q., Brisbane.

#### 4. GYMNOSELIS COQUINA.

*Gymnoscelis coquina*, Warr. Nov. Zool, 1897, p. 69.

I have seen the types of this apparently very distinct species in Coll. Rothschild.

N. Q., Cooktown.

#### 5. GYMNOSELES ERYMNA.

*Eupithecia erymna*, Meyr. Tr. E.S., 1886, p. 192.

*Gymnoscelis erymna*, Meyr. P.L.S. N.S.W., 1890, p. 794.

?*Gymnoscelis subrufata*, Warr. Nov. Zool., 1898, p. 24.

I have examined Warren's type, but cannot be sure whether it is identical with this species, of which I possess no examples.

Meyrick gives Queensland without further locality; Warren's type is from Duaringa. Also from New Guinea and Tonga.

Type in Coll. Meyrick.

#### 6. *GYMNOSCELIS DELOCYMA*, n. sp.

[*δελος* clear, distinct *κυμα* a wave; in allusion to the distinct markings on the forewings.]

♂ ♀, 12-16 mm. Head brown-whitish. Palpi dark fuscous, mixed with brown-whitish. Antennae with projecting scales at joints; ciliations in male  $\frac{1}{4}$ ; brown-whitish annulated with fuscous. Thorax brown-whitish; posteriorly crossed by a broad fuscous posterior bar. Abdomen brown-whitish. Legs dark fuscous; posterior pair ochreous-whitish. Fore wings elongate-triangular; 11 running into 12; brown-whitish, with faintly indicated darker lines; markings blackish; a dot on costa near base, followed by some whitish scales; an inwardly oblique line from costa at  $\frac{1}{3}$  to base of dorsum; an angulated line from costa at  $\frac{1}{3}$  to dorsum at  $\frac{1}{3}$ , faintly marked towards dorsum, preceded by an obscure whitish line; an interrupted angulated line from costa at  $\frac{2}{3}$  to dorsum at  $\frac{2}{3}$ , followed by a whitish line; a submarginal acutely dentate whitish line, immediately preceded by several blackish dots; an interrupted terminal line; cilia, basal half brown-whitish barred with fuscous, apical half grey, apices whitish. Hind wings rather narrow; colour and markings as in fore wings, but with only one basal line, which is obsolete except towards inner margin; posterior line obtusely angulated, slightly concave internal to angle; subterminal line acutely dentate. *G. tristrigosa*, Butl., from Formosa, is closely allied, but posterior line of fore wing is different in form.

Type in Coll. Turner.

N. Q., Townsville, in November, December, and February. Six specimens received from Mr. F. P. Dodd, who bred them from *Scyphiphora hydrophylacea*, the larvae turning over and fastening down the young foliage and feeding under cover like a pyrale.

## 7. GYMNOSELIS MINIMA.

*Chloroclystis minima*, Warr. Nov. Zool., 1897, p. 227.

♂ ♀, 12-13 mm. Head, thorax, and abdomen ochreous-whitish, sparsely irrorated with dark fuscous. Palpi dark fuscous. Antennae whitish, with a few fuscous annulations towards base; ciliations in ♂  $\frac{1}{4}$ . Legs whitish; anterior pair fuscous, tarsi annulated with whitish. Fore wings triangular; 11 running into 12; whitish suffused with grey towards costa and termen, markings dark fuscous; basal and antemedian lines indistinct, except near costa; median line almost obsolete; postmedian line narrow, rounded, finely waved, with a pair of confluent dark fuscous dots above middle; a faint whitish subterminal line preceded by a dark suffusion on costa; no terminal line; cilia pale grey. Hind wings with termen excavated above middle, projecting between veins 3 and 4; colour and markings as in fore wings, but second line without spots and forming an obtuse projection below middle.

Type in Coll. Rothschild.

N. Q., Geraldton (Johnstone River); Q., Burpengary, near Brisbane, and Stradbroke Island; in April and December, six specimens. It appears to be attached to *Phyllanthus ferdinandi*.

## 8. GYMNOSELIS ACIDNA, n. sp.

[*ἀκιδνός*, weak, feeble].

♂ ♀, 12-13 mm. Head whitish, irrorated with dark fuscous; face and palpi dark fuscous. Antennae whitish, towards apex fuscous. Thorax and abdomen whitish, irrorated with dark fuscous. Legs whitish, anterior pair fuscous. Fore wings elongate-triangular; whitish, with numerous suffused fuscous transverse lines; two or three very obscure basal lines; a fine antemedian line from  $\frac{1}{3}$  costa to  $\frac{2}{3}$  dorsum, forming several obtuse projections or loops; a faint median line, closely followed by a broader postmedian line with a rounded angle above middle, nearly straight above and below angle; a fine wavy whitish subterminal line; a fuscous terminal line interrupted on veins; cilia pale grey, bases interrupted by whitish dots opposite veins. Hind wings with termen projecting somewhat between veins 3 and 4; colour and markings as in fore wings.

Type in Coll. Turner.

N. Q., Townsville, in December and February; six specimens received from Mr. F. P. Dodd.

### Genus 3. Chloroclystis.

Chloroclystis, Hb. Verz., 323.

Face with short cone of scales. Palpi moderate, porrected, rough-scaled. Antennae in ♂ shortly ciliated, fasciculate-ciliated or naked. Thorax glabrous beneath. Abdomen crested. Posterior tibiae with all spurs present, or rarely with only a single proximal and two distal spurs. Fore wings with areole simple, 11 running into or anastomosing with 12. Hind wings with 8 anastomosing with cell from near base to beyond middle.

Type.—Chloroclystis coronata, Hb., from Europe.

This is probably a large genus, although there are but few European species. Pasiphila, Meyr., is a synonym. Phrissogonus, Butl., is here included, although Mr. Meyrick has regarded it as distinct. The secondary sexual characters of the ♂ do not appear to me here of generic value, as they are different in each species.

The species are small and inconspicuous, and are difficult to tabulate. The males of the first section are often very different from the females, and are most easily recognised by their secondary sexual characters.

There are no doubt many yet unrecognised species in the northern parts of Australia.

- |   |           |              |
|---|-----------|--------------|
| 1. Wings with transverse lines, mainly reddish-fuscous      | - - - - - | 2            |
| Wings with transverse lines not reddish-fuscous             |           | 3            |
| 2. Hind wings with lines obsolete towards costa             | -         | pyretodes    |
| Hind wings with lines not obsolete towards costa            |           | filata       |
| 3. Hind wings with lines distinct only towards inner margin | - - - - - | laticostata  |
| Hind wings with lines equally distinct throughout           |           | 4            |
| 4. Hind wings with posterior line not angulated             | -         | insigillata  |
| Hind wings with posterior line angulated                    | - -       | 5            |
| 5. Wings with metallic irroration                           | - - -     | metallospora |
| Wings without metallic irroration                           | - - -     | 6            |

6.	Hind wings with termen excised above middle	catastreptes
	Hind wings with termen rounded or slightly sinuate	7
7.	Wings more or less greenish tinged	8
	Wings not greenish	9
8.	Wings with darker median band	cissocosma
	Wings without darker median band	mniochroa
9.	Hind wings with posterior line marked with dark longitudinal streaks	10
	Hind wings with posterior line without dark streaks	12
10.	Hind wings with posterior line acutely angulated	11
	Hind wings with posterior line not acutely angulated	testulata
11.	Fore wings with posterior line once angulated	guttifera
	Fore wings with posterior line twice angulated and wavy	nigrilineata
12.	Lower half of face dark fuscous	gonias
	Face wholly grey	ablechra

Section I.—Males with secondary sexual characters on fore wings  
(Phrissogonus).

9. CHLOROCLYSTIS CATASTREPTES.

Phrissogonus catastreptes, Meyr. P.L.S. N.S.W., 1890, p. 797.

Type in Coll. Meyrick.

N.Q., Mackay; Q., Brisbane; N.S.W., Sydney.

10. CHLOROCLYSTIS TESTULATA.

Eupithecia testulata, Gn. Lep. x., p. 352.

Scotosia denotata, Wlk. Brit. Mus. Cat., xxv., p. 1361.

Phibalapteryx parvulata, Wlk. Brit. Mus. Cat., xxvi., p. 1721.

Phrissogonus denotatus, Meyr. P.L.S. N.S.W., 1890, p. 798.

I cannot be sure from the description that Guenée's name applies to this species, but think it highly probable.

*Var. a.* ♀. Fore wings with central part of disc suffusedly whitish.

From Hobart (Coll. Lyell).



*Var. b.* ♀. Thorax, base of abdomen, base of fore wing, and an oblique line beneath apex, suffused with reddish.

From Gisborne (Coll. Lyell).

N.S.W., Glen Innes, Newcastle, Sydney, Bathurst, Cooma ; V., Gisborne ; T., Deloraine, Hobart ; S.A., Mt. Lofty, Port Lincoln. Also from New Zealand.

#### 11. CHLOROCLYSTIS INSIGILLATA.

*Eupithecia insigillata*, Wlk. Brit. Mus. Cat., xxiv., p. 1245.

*Eupithecia destructata*, Wlk. Char. Undescr. Lep. Het., p. 80.

*Phrissogonus insigillatus*, Meyr. P.L.S. N.S.W., 1890, p. 799. Type in British Museum.

N.Q., Townsville ; Q., Brisbane, Southport ; N.S.W., Glen Innes, Sydney ; V., Gisborne, Melbourne ; S.A., Mt. Lofty ; W.A., Albany, Perth, York.

#### 12. CHLOROCLYSTIS APPROXIMATA.

*Larentia approximata*, Wlk. Char. Undescr. Lep. Het., p. 79.

*Phrissogonus pyretodes*, Meyr. P.L.S. N.S.W., 1890, p. 799. Type in Melbourne Museum.

Mr. Illidge has found the larvae of this species feeding on the flowers of acacia.

Q., Brisbane ; N.S.W., Newcastle, Sydney ; V., Melbourne, Gisborne ; T., George's Bay.

#### 13. CHLOROCLYSTIS LATICOSTATA.

*Larentia laticostata*, Wlk. Brit. Mus. Cat., xxiv., p. 1196.

*Scotosia canata*, Wlk. Brit. Mus. Cat., xxv., p. 1357.

*Phrissogonus laticostatus*, Meyr. P.L.S. N.S.W., 1890, p. 801. Type in British Museum.

Q., Daringa, Nambour, Brisbane, Southport, Warwick, Dalby ; N.S.W., Glen Innes, Sydney, Blackheath, Bathurst, Cooma ; V., Gisborne, Warragul, Melbourne, Birchip ; T., Hobart ; S.A., Mt. Lofty, Port Lincoln ; W.A., Albany, Geraldton, Carnarvon.

Section II.—Males without secondary sexual characters in fore wings  
(Chloroclystis).

14. CHLOROCLYSTIS FILATA.

*Eupithecia filata*, Gn. Lep. x., p. 353.

*Phibalapteryx rubroferrata*, Wlk. Brit. Mus. Cat., xxv., p. 1341.

*Pasiphila filata*, Meyr. P.L.S. N.S.W., 1890, p. 795.

N.S.W., Sydney, Mt. Kosciusko; V., Melbourne, Gisborne;  
T., Deloraine, Hobart.

15. CHLOROCLYSTIS METALLOSPORA, n. sp.

[*μεταλλοσπορος*, sprinkled with metal].

♂ ♀, 13-20 mm. Head and antennae grey-whitish. Palpi grey-whitish mixed with blackish. Thorax and abdomen whitish mixed with grey and dark fuscous, with scattered scales showing pale brassy reflections. Legs whitish, anterior pair fuscous; tarsi annulated with whitish; posterior tibiae with outer spurs about half as long as inner spurs. Fore wings elongate-triangular; grey-whitish irrorated with fuscous; many scales showing a brassy reflection in oblique light; markings blackish; a transverse line near base; two well-marked lines from costa before middle arising near together, first waved, second sigmoid, diverging towards inner margin at  $\frac{2}{5}$  and  $\frac{3}{5}$ ; a posterior line from costa at  $\frac{2}{3}$  to before anal angle, first straight, sharply bent in middle of disc and thence inwardly curved; an obscure dentate whitish subterminal line; an interrupted black line along hind margin; cilia grey, apices and a series of dots opposite veins whitish. Hind wings as fore wings, but basal and median lines absent; second line with a prominent median acute projection.

*Variety*.—Median band of fore wing and hind wing between first and posterior lines wholly dark fuscous except towards costa, the fuscous suffusion extending in hind wing along inner margin nearly to base.

Q., Brisbane; taken rather commonly on fences in July, August and September.

16. *CHLOROCLYSTIS CISSOCOSMA*, n. sp.

[κισσοκοσμος, with ivy-green ornamentation].

♂ ♀, 16-18 mm. Head green mixed with white. Palpi dark fuscous mixed with whitish. Antennae grey; in ♂ with a short rounded process from upper surface of basal joint, ciliations minute ( $\frac{1}{8}$ ). Thorax green mixed with whitish and fuscous. Abdomen whitish mixed with ferruginous, dark fuscous, and green. Legs whitish; anterior pair fuscous, tibiae and tarsi annulated with whitish; posterior tibiae with outer distal spur short, inner long, in ♂ very long and thickened, outer proximal spur absent. Fore wings elongate-triangular, costa in ♂ abruptly bent near base, in ♀ gently arched, termen bowed, oblique; green with fine white lines and fuscous blotches and suffusion; a broad median band partly suffused with fuscous, and followed by two fine white lines, posterior edge arched outwards and twice obtusely angled; a fine white dentate subterminal line preceded by three dark fuscous blotches on costa and above and below middle; a dark fuscous terminal line, narrowly interrupted by white on veins; cilia grey, narrowly interrupted by white opposite veins. Hind wings rather narrow, termen rounded, slightly indented at  $\frac{1}{3}$  from costa; colour and markings as fore wings, but subterminal fuscous blotches less developed.

This species would be referable to Warren's genus *Megatheca*, which I think is not to be regarded as a distinct genus, the development of the proximal spurs of hind tibiae being variable in allied species, the outer spur tending to obsolescence. Compare with the following species.

Type in Coll. Turner.

Q., Brisbane, from May to August; four specimens.

17. *CHLOROCLYSTIS MNIOCHROA*, n. sp.

[μνιοχρωος, mossy-tinged].

♂ ♀, 15-19 mm. Head whitish; face and palpi whitish, irrorated with dark fuscous. Antennae whitish, towards apices grey; in ♂ with a thick ridge of dark grey hairs on middle half of upper edge, ciliations minute ( $\frac{1}{8}$ ). Thorax and abdomen whitish mixed with dark fuscous and greenish. Legs fuscous, tarsal annulations and posterior pair whitish; posterior tibiae

with outer distal spur about  $\frac{1}{2}$  inner, outer proximal spur about  $\frac{1}{4}$  inner. Fore wings elongate-triangular, costa moderately arched, termen bowed, oblique; grey, greenish-tinged, with some fuscous irroration; partly irrorated with pale ferruginous towards costa; indications of a fuscous basal line; antemedian line fuscous from  $\frac{1}{3}$  costa to  $\frac{1}{3}$  dorsum, angled outwards in disc; postmedian line crenulate from  $\frac{2}{3}$  costa to  $\frac{2}{3}$  dorsum, arched outwards in disc and twice obtusely angulated, edged by a whitish line; a fine dentate whitish subterminal line; an interrupted fuscous terminal line; cilia grey interrupted by whitish opposite veins. Hind wings rather narrow, termen crenulate; colour and markings as fore wings.

Type in Coll. Turner.

Q., Nambour and Brisbane, in March, July, and November; three specimens.

#### 18. CHLOROCLYSTIS GUTTIFERA, n. sp.

[Guttiferus, marked by drops].

♂ ♀, 15-18 mm. Head and palpi white. Antennae grey-whitish; ciliations of male  $\frac{1}{3}$ . Thorax and abdomen white, irrorated with pale ochreous-fuscous; first three abdominal segments annulated and irrorated with blackish. Legs whitish, anterior pair mostly fuscous; posterior tibiae with inner spurs very long, outer spurs about  $\frac{1}{4}$  as long. Fore wings elongate-triangular; white suffused with pale grey, which forms numerous obscure transverse lines, with a few scattered dark fuscous scales; markings dark fuscous; a line from costa at  $\frac{1}{3}$  to inner margin near base; an obscure or incomplete line from costa at  $\frac{1}{3}$  to inner margin at  $\frac{1}{4}$ ; posterior line from costa at  $\frac{2}{3}$  to inner margin at  $\frac{2}{3}$ , beneath angulation incomplete, being represented by short longitudinal lines along veins; a fine waved white subterminal line, preceded by small fuscous suffusions at and beneath costa; a narrow interrupted hind marginal line; cilia whitish, barred with grey. Hind wings rather narrow; termen scarcely crenulate; markings as fore wings, but basal line absent; posterior line very acutely angulated in disc, being represented only by longitudinal marks on veins.

Q., Brisbane, Stradbroke Island; two specimens.

19. *CHLOROCLYSTIS NIGRILINEATA.*

*Chloroclystis nigrilineata*, Warr. Nov. Zool., 1898, p. 23.

I have seen only the type which is a ♀ without hind legs, but is probably correctly referred to this genus.

Q., Duinga (Warren).

20. *CHLOROCLYSTIS GONIAS*, n. sp.

[*γωνία*, an angle.].

♀, 22 mm. Head whitish; lower half of face and palpi dark fuscous. Antennae grey; basal joint whitish. Thorax brown-whitish; upper edge and apex of tegulae fuscous. Abdomen brown-whitish, with a longitudinal lateral blackish line as far as sixth segment; beneath this is a white blotch on fifth and sixth segments. Legs whitish; anterior pair infuscated; posterior tibiae with distal spurs long, inner twice as long as outer, proximal spurs very short, equal. Fore wings triangular; pale brownish, suffused with whitish; markings dark fuscous; traces of a basal line; a line along costa to  $\frac{1}{3}$ ; a finely dentate, interrupted line from costa at  $\frac{1}{3}$  to inner margin at  $\frac{1}{3}$ ; a faintly marked whitish line from costa at  $\frac{2}{5}$  to middle of inner margin; a strongly marked line from costa at  $\frac{2}{3}$  sharply angulated just below middle of disc, thence slightly wavy to inner margin at  $\frac{3}{4}$ ; a partly obsolete wavy whitish subterminal line; a dot on costa before apex; cilia whitish, mixed with pale brownish. Hind wings rather narrow; termen wavy; colour and markings as in fore wings, but basal and antemedian lines wanting; posterior line with a prominent double obtuse projection in disc below middle; succeeded by some whitish scales, and a white spot above anal angle; a white dot on termen opposite angle of posterior line.

*Chloroclystis acygonia*, Swin., from Assam, is closely allied.

Q., Brisbane; one specimen in September.

21. *CHLOROCLYSTIS ABLECHRA*, n. sp.

[*ἀβληχρος*, weak, feeble.].

♂ ♀, 15 mm. Head grey-whitish. Palpi whitish mixed with dark fuscous. Antennae grey. Thorax and abdomen pale grey.

Legs whitish, anterior pair fuscous, tarsi annulated with whitish, posterior tibiae with outer spurs about half length of inner spurs. Fore wings elongate-triangular; pale grey, with faint indications of transverse lines; basal, antemedian, and postmedian lines mostly blackish; postmedian line angulated in middle, nearly straight above and below angle: a faint wavy or slightly dentate whitish subterminal line preceded on costa by a dark fuscous spot; a fuscous terminal line interrupted on veins; cilia whitish-grey. Hind wings with termen projecting somewhat between veins 3 and 4; colour and markings as in fore wings, but without blackish lines; a few blackish scales on an obtuse projection of middle of postmedian line. Under side whitish, with suffused fuscous antemedian and postmedian lines and a terminal band; fore wings with a median line towards costa; hind wings with a median dot.

A small obscure species recalling *Gymnoscelis* but with two pairs of spurs on posterior tibiae.

N.Q., Townsville, in July and again in February, four specimens from Mr. F. P. Dodd; Geraldton, in November, one ♀ in poor condition without blackish lines on fore wings.

#### Gen. 4. *Mesoptila*.

*Mesoptila*, Meyr. P.L.S. N.S.W., 1890, p. 794.

Face with small cone of scales. Antennae in ♂ unknown. Palpi moderate, porrected, rough-scaled. Abdomen slightly crested. Posterior tibiae with all spurs present. Fore wings with central tuft of erect scales in disc; areole simple. Hind wings with veins 6 and 7 stalked (Meyrick).

#### 22. MESOPTILA COMPSODES.

*Mesoptila compsodes*, Meyr. P.L.S. N.S.W., 1890, p. 794.

Type in Coll. Meyrick.

N.S.W., Sydney.

#### Gen. 5 *Tephroclystia*.

*Tephroclystia*, Hb. Verz., p. 323.

Face with short cone of scales. Palpi moderate, porrected, rough-scaled. Antennae in ♂ ciliated. Thorax glabrous beneath. Abdomen more or less distinctly crested throughout.

Posterior tibiae with all spurs present. Fore wings with areole simple; vein II free. Hind wings with 8 anastomosing with cell from near base to beyond middle (Meyrick, Tr.E.S., 1892, p. 65).

A genus containing numerous species, of which the majority are European. Sir Geo. Hampson records 20 species from India. It is hardly represented in our fauna, the species here described being only a straggler.

*Eupithecia*, Curt., is a synonym.

### 23. *TEPHROCLYSTIA MELANOLOPHA.*

*Eupithecia melanolopha*, Swin. A.M.N.H. (6), xvi., p. 296. Hmps., Moths Ind., iv., p. 557.

♂, 13-14 mm. Head, palpi, antennae, and thorax ochreous-whitish. Antennae of male slightly serrate, ciliations  $\frac{2}{3}$ . Abdomen slightly crested on third and fourth segments; brown-whitish; apex of tuft dark fuscous. Legs fuscous; posterior pair whitish. Fore wings elongate-triangular; whitish, mixed with reddish-brown; in oblique light irrorated with leaden-metallic scales; a basal patch, fuscous towards costa, towards inner margin obsolete; a broad median band, towards costa fuscous, towards inner margin reddish-brown, containing a dark fuscous discal dot, and outlined anteriorly and posteriorly with whitish; an obscure whitish subterminal line, after which disc is suffused with fuscous; cilia fuscous, apices paler. Hind wings rather narrow; termen nearly straight; whitish mixed with fuscous and reddish-brown, darker towards inner margin; two distinct white lines start from inner margin at  $\frac{2}{5}$  and near anal angle, becoming lost in disc; cilia pale fuscous, at anal angle white.

N.Q., Townsville, Queensland; in February and March. Three specimens received from Mr. F. P. Dodd. Also from India, Ceylon and Bali (British Museum Collection).

### Gen. 6. *Mnesiloba.*

*Mnesiloba*, Warr. Nov. Zool., 1901, p. 196.

Head with short cone of scales. Palpi moderate, porrected, rough-scaled. Antennae in ♂ simple, very shortly ciliated. Thorax not hairy beneath. Abdomen with small dorsal crests. Posterior tibiae with two pairs of spurs. Fore wings with areole



double. Hind wings in ♂ with a deep indentation near tornus, separating a minute, not-folded anal lobe; vein 5 equidistant from 4 and 6 at base, discocellular straight; 6 and 7 stalked; 8 anastomosing with cell to near end.

Type.—*M. eupitheciata*, Wlk.

I have adopted Warren's genus, as the anal lobe of the ♂ hind wings hardly seems to correspond to that present in the European genus *Lobophora*, Curtis. In other characters it agrees with *Eucymatoge*, Hb.

24. *MNESILOBA EUPITHECIATA*.

*Phibalapteryx eupitheciata*, Wlk. Brit. Mus. Cat., xxvi., p. 1720.

*Cephalissa delogramma*, Meyr. Tr.E.S., 1886, p. 195.

*Lobophophora delogramma*, Meyr. P.L.S. N.S.W., 1890, p. 807.

*Eupithecia dentifascia*, Hmps. Ill. Het., viii., p. 117, pl. 152, f. 12.

*Eupithecia eupitheciata*, Hmps. Moths of India, iii., p. 398.

Q., Brisbane; also from Fiji, Tonga, Ceylon and India.

Genus 7. *Microdes*.

*Microdes*, Gn. Lep. x., p. 296.

Face with short cone of scales. Palpi long, porrected, rough-scaled. Antennae in ♂ thickened, simple, naked or very shortly ciliated. Thorax not hairy beneath. Abdomen not crested. Posterior tibiae, with all spurs present. Fore wings with vein 5 from below middle of cell, more or less approximated to 4, 7 in ♂ widely separated from 8, 9, 10, the interval being occupied by a shallow depression on the upper surface, areole simple, 11 running into 12. Hindwings in ♂ often distorted or with a patch of altered scales, veins 6 and 7 stalked.

Type.—*M. villosata*, Gn.

The structure of vein 5 of the fore wings is unique in this family, but is doubtless correlated with the distorted neuration of the ♂, although present in both sexes.

- |   |   |   |         |
|---|---|---|---------|
| 1. Fore wings with white transverse lines | - | - | typhopa |
| Fore wings without white transverse lines | - | - | 2       |



- |   |              |             |
|---|--------------|-------------|
| 2. Fore wings with a thick black basal streak -     | melanocausta |             |
| Fore wings with slight or no basal streak - -       | - -          | 3           |
| 3. Fore wings with posterior line with two project- |              |             |
| ing teeth - - - - -                                 | - - - - -    | diplo-donta |
| Fore wings with posterior line not toothed - -      | - -          | 4           |
| 4. Fore wings whitish-grey - - - - -                | - - - - -    | villosata   |
| Fore wings fuscous grey - - - - -                   | - - - - -    | squamulata  |
- This tabulation applies to both sexes, but the males are most easily distinguished by the secondary sexual characters.

25. *MICRODES VILLOSATA.*

*Microdes villosata*, Gn. Lep. x., p. 297, pl. xv., f. 8; Meyr., P.L.S. N.S.W., 1890, p. 802.

*Panagra mixtaria*, Wlk. Brit. Mus. Cat., xxvi., p. 1663.

*Microdes toriata*, Feld. Reise Nov., pl. cxxxii., f. 34.

N.S.W., Sydney; V., Melbourne, Casterton, Gisborne; T., Launceston, Hobart; S.A., Adelaide, Mt. Lofty; W.A., Albany.

Felder refers this species to New Zealand, no doubt erroneously.

26. *MICRODES SQUAMULATA.*

*Microdes squamulata*, Gn. Lep. x., p. 298; Meyr., P.L.S., N.S.W., 1890, p. 803.

*Oesymina stipataria*, Wlk. Char. Undesc. Lep., Het., p. 80.

Q., Toowoomba; V., Melbourne, Gisborne; T., Launceston; W.A., Albany.

I have found the larvae on *Acacia decurrens*.

27. *MICRODES TYPHOPA.*

*Microdes typhopa*, Sow. Tr.R.S. S.A., 1897, p. 50.

I have examined the type (♀) of this very distinct species. S.A., Adelaide (Semaphore).

28. *MICRODES MELANOCAUSTA.*

*Microdes melanocausta*, Meyr. P.L.S. N.S.W., 1890, p. 802.

Type in Coll. Meyrick.

This species is unknown to me.



30. *EUCHOECA ATROSTRIGATA.*

*Epicyme atrostrigata*, Warr. Nov. Zool., 1894, p. 394.

*Asthena porphyretica*, Low. Tr.R.S. S.A., 1896, p. 152.

Q., Rockhampton (Lower), Brisbane, two ♀ specimens.

There is a series in Coll. Rothschild said to be from Queensland. Though I cannot be quite sure of the identity of my example with these, I think it scarcely doubtful. The difference in the neuration between this and *rubropunctaria* is probably constant. Of the latter I have examined a series. The wings are ochreous-tinged, not pinkish-tinged as in *rubropunctaria*. Both species are variable.

31. *EUCHOECA RUBROPUNCTARIA.*

*Ptychopoda rubropunctaria*, Dbld. Dieff. N.Z., ii., p. 287.

*Acidalia pulchra*, Wlk. Brit. Mus. Cat., xxiii., p. 780 (nec Dbld).

*Asthena risata*, Gn. Lep. ix., p. 438.

*Asthena mullata*, Gn. Ent. Mo. Mag. v., p. 42.

*Asthena vexata*, Wlk. Char. Undescr. Lep., Het., p. 78.

*Euchoeca rubropunctaria*, Meyr. P.L.S. N.S.W., 1890, p. 811.

Q., Duaringa, Brisbane, Toowoomba; N.S.W., Newcastle, Sydney; V., Melbourne, Fernshaw, Gisborne; T., Mt. Wellington, St. George's Bay. Also from New Zealand.

Genus 9. *Asthena.*

*Asthena*, Hb. Verz., p. 310.

Face smooth. Palpi short, porrected, slender, loosely scaled. Antennae in ♂ shortly ciliated. Thorax glabrous beneath. Posterior tibiae with all spurs present. Fore wings with areole double. Hind wings with 8 anastomosing with cell from near base to beyond middle (Meyrick).

Type.—*A. candidata*, Schiff., from Europe (Hampson).

1. Wings greenish	-	-	-	-	-	2
Wings not greenish	-	-	-	-	-	7
2. Face green. Fore and hind wings with conspicuous dark discal dots	-	-	-	-	<i>glaucosa</i>	
Face not green. Fore and hind wings without conspicuous dark discal dots	-	-	-	-		3

3.	Face ferruginous orange	-	-	-	-	-	4
	Face fuscous or ochreous-brown	-	-	-	-	-	5
4.	Hind wings with termen angulated	-	-	-	-	urarcha	
	Hind wings with termen evenly rounded	-	-	-	-	oceanias	
5.	Fore wings with basal third of cilia grey	-	-	-	-	euphylla	
	Fore wings with basal third of cilia not grey	-	-	-	-		6
6.	Head green on crown	-	-	-	-	thalassias	
	Head fuscous on crown (rarely white)	-	-	-	-	pulchraria	
7.	Wings with ground colour yellowish-orange	-	-	-	-	anthodes	
	Wings with ground colour, not orange	-	-	-	-		8
8.	Hind wings with termen evenly rounded	-	-	-	-	xylocyma	
	Hind wings with termen angled	-	-	-	-		9
9.	Hind wings with termen sinuate inwards on lower						
	half	-	-	-	-	scoliota	
	Hind wings with termen not sinuate inwards on						
	lower half	-	-	-	-		10
10.	Fore wings with costa fuscous	-		pulchraria	var.	decolor	
	Fore wings with costa not fuscous	-	-	-	-	euthecta	

32. *ASTHENA GLAUCOSA.*

*Iodis glaucosa*, Luc. P.L.S. N.S.W., 1888, p. 1263.

*Euchloris microgyna*, Low. Tr.R.S. S.A., 1894, p. 85.

♀, 22 mm. Head green; fillet green, anterior margin narrowly white; face green (partly rubbed). Palpi whitish. Antennae whitish. Thorax green. Abdomen with several minute dorsal crests; green, sides and crests white. Legs whitish; anterior pair fuscous. Fore wings triangular, costa moderately arched, termen obliquely bowed; dull green, with obscure paler transverse lines; a narrow fuscous streak along costa except close to base and apex; a very conspicuous dark green discal dot, looking almost blackish; a terminal series of minute white dots opposite veins; cilia greenish. Hind wings with termen sharply angled on vein 4; colour and markings as fore wings.

Type in Coll. Lucas. The type of *microgyna* is in the Queensland Museum.

Q., Brisbane.

33. *ASTHENA URARCHA.*

*Asthena urarcha*, Meyr. P.L.S. N.S.W., 1890, p. 812.

Type in Coll. Meyrick.

V., Ocean Grange, near Sale. One ♂ in Coll. Lyell. T., Deloraine. One ♂ in Coll. Meyrick.

34. *ASTHENA OCEANIAS.*

*Asthena oceanias*, Meyr. P.L.S. N.S.W., 1890, p. 816.

Type in Coll. Meyrick.

V., Ocean Grange, near Sale. One ♀ in Coll. Lyell. W.A., Albany. Mr. Meyrick took one ♀ in September, and I took two ♀ in January. I think this and the preceding will prove to be sexes.

35. *ASTHENA THALASSIAS.*

*Asthena thalassias*, Meyr. P.L.S. N.S.W., 1890, p. 813.

*Asthena pellucida*, Luc. P.L.S. N.S.W., 1892, p. 253.

Type in Coll. Meyrick.

Q., Rockhampton, Nambour, Brisbane, Mt. Tambourine; N.S.W., Sydney; V., Fernshaw.

36. *ASTHENA PULCHRARIA.*

*Acidalia pulchraria*, Dbld. Dieff. NZ., ii., p. 286.

*Asthena ondinata*, Gn. Lep. ix., p. 438, pl. xix., f. 4 (poor); Feld., pl. 128, f. 17.

*Chlorochroma plurilineata*, Wlk. Brit. Mus. Cat., xxii., p. 563.

*Asthena pulchraria*, Meyr. P.L.S. N.S.W., 1890, p. 813.

*N. var., decolor.*

All the green markings replaced by pale ochreous-brown. At first sight this form appears very distinct, but I believe it will prove to be only a variety of this species. There is one ♂ in fine condition in Coll. Lyell, taken near Gisborne.

N.S.W., Glen Innes, Sydney, Blackheath, Bathurst, Mt. Kosciusko; V., Sale, Melbourne, Gisborne; T., Deloraine, Hobart; W.A., Albany. Also from New Zealand.

37. *ASTHENA EUPHYLLA.*

*Asthena euphylla*, Meyr. P.L.S. N.S.W., 1890, p. 815.

Type in Coll. Meyrick.

T., Deloraine, Hobart.

38. *ASTHENA XYLOCYMA.*

*Asthena xylocyma*, Meyr. P.L.S. N.S.W., 1890, p. 814.

Type in Coll. Meyrick.

V., Melbourne (Lower) ; W.A., Albany.

39. *ASTHENA SCOLIOTA.*

*Asthena scoliota*, Meyr. P.L.S. N.S.W., 1890, p. 815.

Type in Coll. Meyrick.

W.A., Albany.

40. *ASTHENA ANTHODES.*

*Asthena anthodes*, Meyr. P.L.S. N.S.W., 1890, p. 816.

Type in Coll. Meyrick.

N.S.W., Sydney ; V., Melbourne ; S.A., Mt. Lofty.

41. *ASTHENA EUTHECTA*, n. sp.

[*εὐθηκτος*, well-sharpened ; in allusion to the fore wings.]

♀, 21-22 mm. Head ochreous whitish, face and palpi pale brownish fuscous. Antennae whitish. Thorax ochreous whitish, with two minute fuscous dots posteriorly. Abdomen, ochreous-whitish, with a pair of fuscous dots on dorsum of each segment. Legs ochreous-whitish, irrorated with fuscous ; anterior pair fuscous with whitish annulations. Fore wings triangular, apex acute, sometimes slightly produced, hind margin bowed, oblique, sinuate beneath apex ; ochreous-whitish, with numerous transverse waved pale ochreous-brown lines, bearing fuscous dots ; posterior line better marked, very obtusely angulated ; a minute blackish discal dot ; a series of fuscous terminal dots ; cilia whitish, with a few dark fuscous scales. Hind wing with termen rather acutely angulated on vein 4 ; markings as in fore wings.

Type in Coll. Turner.

Q., Brisbane ; V., Gisborne (Lyell).

Genus 10. *Scordylia*.*Scordylia*, Gn.

Face with slight cone of scales. Palpi moderate, porrected, rough-scaled. Antennae in ♂ ciliated. Thorax glabrous beneath. Posterior tibiae with all spurs present. Fore wings with areole simple. Hind wings with vein 5 arising from nearer 4 than 6, discocellular angled; 8 anastomosing with cell to beyond middle.

Mr. Meyrick now includes this genus in *Plemyria*, Hb., but this appears doubtfully correct, for the only two European species which I have been able to examine, *rivata*, Hb., and *sociata*, Bkh., have vein 5 of hind wings approximated at base to 6. I have, therefore, retained the above name for want of a better, although I am unacquainted with the type.

Sir George Hampson would probably include the following species with *Venusia*, Curt., with which they agree in neuration, but differ in the ♂ antennae not being pectinated.

- |   |   |   |   |   |                     |
|---|---|---|---|---|---------------------|
| 1. Fore wings brownish-ochreous                                       | - | - | - | - | 2                   |
| Fore wings fuscous  | - | - | - | - | 3                   |
| 2. Fore wings with white antemedian, median, and postmedian lines     | - | - | - | - | <i>leucophragma</i> |
| Fore wings without white lines  | - | - | - | - | <i>emporias</i>     |
| 3. Fore wings with median band with a long sharp posterior projection | - | - | - | - | <i>oxyntis</i>      |
| Fore wings without long posterior projection on median band           | - | - | - | - | <i>decipiens</i>    |

42. *SCORDYLIA OXYNTIS*.

*Scordylia oxyntis*, Meyr. P.L.S. N.S.W., 1890, p. 817.

Type in Coll. Meyrick.

V., Melbourne.

43. *SCORDYLIA LEUCOPHRAGMA*.

*Scordylia leucophragma*, Meyr. P.L.S. N.S.W., 1890, p. 818.

Type in Coll. Meyrick.

Q., Mt. Tambourine, in October; V., Melbourne.

## 44. SCORDYLIA EMPORIAS, n. sp.

[ἑμπορος, a traveller, wanderer].

Plemyria emporias, Meyr. MS.

♂ ♀, 17-22 mm. Head, palpi, antennae, and thorax pale ochreous-brown. Palpi horizontally porrect, very long, 3, densely clothed with short rough scales. Abdomen above reddish-ochreous, edges of segments blackish, toward apex and at sides greyish. Legs whitish, irrorated with fuscous; anterior pair mostly fuscous. Fore wings elongate-triangular, hind margin rather strongly bowed, oblique, slightly sinuate beneath apex; pale ochreous-brown; basal area, median band, and a vague suffusion along hind margin brownish; markings blackish; an outwardly curved line from costa at  $\frac{1}{6}$  to inner margin at  $\frac{1}{6}$ , bounding basal area; a second line parallel to this, obsolete towards costa; anterior line bounding median band from costa at  $\frac{1}{3}$ , thence nearly straight to inner margin at  $\frac{1}{3}$ ; posterior line from costa before  $\frac{2}{3}$ , obtusely angulated in disc, thence concave to inner margin at  $\frac{3}{4}$ ; median band contains a blackish irroration towards the inner margin, and a blackish ring in centre of disc; an irregular suffused blotch in disc towards apex, containing a whitish spot, from which proceeds an obsolete line, represented by several dots to before anal angle; an interrupted terminal line; cilia pale ochreous-brown, with a few fuscous scales. Hind wings rather narrow, hind margin rounded; brown-whitish without markings; cilia brown-whitish.

Q., Nambour, Brisbane, two specimens in November; N.S.W., Sydney, in December (Lyell).

## 45. SCORDYLIA DECIPIENS.

Cidaria decipiens, Butl. Tr.E.S., 1886, p. 438.

Scordylia decipiens, Meyr. P.L.S. N.S.W., 1890, p. 818.

Type in British Museum.

N.S.W., Sydney.

## Genus 11. Scotocyma, nov.

[σκοτοκυμος, darkly waved].

Face with short cone of scales. Palpi ascending obliquely, or closely appressed to frons, rather short, rough-scaled. Antennae



in ♂ very shortly ciliated. Thorax not hairy beneath. Abdomen not crested. Anterior tibiae in both sexes with a long tuft of hair from under surface near base, closely appressed to tibia; posterior tibiae with two pairs of spurs. Fore wings with areole simple; veins 7, 8, 9, 10, 11 stalked. Hind wings with 3 and 4 separate, 5 approximated at base to 6, 6 and 7 stalked, 8 anastomosing with cell to beyond middle.

The palpi, neuration of both wings, and anterior tibiae distinguish this genus.

Type.—*S. albinotata*, Wlk.

#### 46. SCOTOCYMA ALBINOTATA.

*Scotosia albinotata*, Wlk. Brit. Mus. Cat., xxxv., p. 1689.

*Xanthorhoe* (?) *platydesma*, Low. Tr.R.S. S.A., 1894, p. 79.

♂ ♀, 30-34 mm. Head and palpi brown, or reddish-brown mixed with dark fuscous. Antennae dark grey. Thorax and abdomen fuscous mixed with brownish. Legs dark fuscous, irrorated, and tarsi annulated with ochreous-whitish. Fore wings rather broadly triangular, costa moderately arched, termen bowed, oblique; brown variably mixed with brown-whitish and dark fuscous; a small dark basal patch with convex border, more or less distinct; median band darker, or paler, than rest of wing, sometimes marked with whitish spots or suffusion; anterior border outwardly curved, from  $\frac{1}{3}$  costa to  $\frac{1}{3}$  dorsum, sometimes edged with brown-whitish; sometimes a short, blackish, longitudinal bar in median band from convexity of anterior border; posterior border from  $\frac{2}{3}$  costa to  $\frac{2}{3}$  dorsum, with a rather prominent double median projection, sometimes edged with brown-whitish or with whitish dots on veins; a slender, pale, dentate, subterminal line often obsolete, often marked by minute dots on veins, and by a larger pure white or whitish spot between veins 3 and 4: a blackish terminal line; cilia dark fuscous mixed with brownish. Hind wings with termen rounded, dentate; brownish-fuscous, with numerous fine, dark, transverse lines; sometimes a small, subterminal, white or whitish spot between veins 3 and 4: terminal line and cilia as fore wings. Underside grey, with whitish lines and median subterminal spot.

A very variable species. One ♂ in the Brisbane Museum has the whole of median band uniform dark fuscous.

Type in British Museum. Sir Geo. Hampson kindly examined the neuration of the type at my request.

Q., Duaringa, Brisbane.

Genus 12. *Eucymatoge*.

*Eucymatoge*, Hb. Verz.

Face with short cone of scales. Palpi moderate, porrected, rough-scaled. Antennae in ♂ ciliated. Thorax glabrous beneath. Abdomen more or less distinctly crested throughout. Posterior tibiae with all spurs present. Fore wings with areole double. Hind wings with 8 anastomosing with cell from near base to beyond middle (Meyrick).

Closely allied to *Hydriomena*, differing in the abdominal crests.

- |   |         |             |
|---|---------|-------------|
| 1. Thorax with a posterior crest  | - - - - | 2           |
| Thorax smooth   | - - - - | 5           |
| 2. Fore wings with posterior edge of median band angled                                 | - - - - | 3           |
| Fore wings with posterior edge of median band not angled                                | - - - - | leucophanes |
| 3. Hind wings with many fine transverse lines   | - -     | 4           |
| Hind wings with few lines becoming obsolete towards costa                               | - - - - | peplodes    |
| 4. Fore wings with posterior edge of median band forming a single acute angle. Palpi 1½ | -       | scotodes    |
| Fore wings with posterior edge of median band forming a double obtuse angle. Palpi 2½   | -       | mortuata    |
| 5. Fore wings with whitish spots, discal dot obscure                                    |         | callizona   |
| Fore wings without whitish spots, discal dot very distinct                              | - - - - | ghosha      |

*Section I.—Vein 5 of hind wings approximated, to 6. Thorax with a posterior crest.*

47. *EUCYMATOGE PEPLODES*, n. sp.

[*πεπλωδης*, like a robe or cloak].

♂ ♀, 16-22 mm. Head, palpi, thorax, abdomen brown-whitish mixed with dark fuscous. Thorax with a well-marked, bifid, posterior crest. Antennae fuscous; ciliations in male ¼. Legs

dark fuscous annulated with whitish; posterior pair whitish, with a few scattered, dark fuscous scales. Fore wings triangular; termen bowed, oblique; whitish mixed with fuscous and dark fuscous, the light and dark scales tending to form obscure narrow wavy transverse lines; a blackish transverse line near base; a broad, darker, median band outlined by blackish lines; anterior line from costa at  $\frac{1}{3}$  to inner margin at  $\frac{1}{3}$ , concave; posterior line from costa at  $\frac{2}{3}$  to inner margin at  $\frac{2}{3}$ , with two prominent indentations in costal half of disc; immediately beyond this is a double whitish line, sometimes clear white except at margins; sometimes a wavy, subterminal, whitish line can be traced; an interrupted dark fuscous terminal line; cilia whitish, mixed with fuscous and dark fuscous. Hind wings with termen rounded, not wavy; whitish suffused with fuscous; transverse lines indicated towards inner margin; terminal line and cilia as in fore wings.

Q., Brisbane; taken rather commonly on fences, from July to November. Also from Warwick and Stanthorpe.

#### 48. EUCYMATOGE SCOTODES, n. sp.

[σκοτωδης, dark-looking].

♂ ♀, 18-24. Head, palpi, thorax, and abdomen dark fuscous mixed with whitish. Palpi  $1\frac{1}{2}$ . Thorax with a small bifid posterior crest. Antennae dark fuscous; ciliations in ♂  $\frac{1}{4}$ . Legs dark fuscous mixed with whitish; tarsi annulated with whitish. Fore wings triangular, termen slightly bowed, oblique, wavy; whitish densely irrorated with dark fuscous, which tends to form numerous fine wavy transverse lines; a blackish discal dot; outer edge of median band with a short, acute, angular projection in middle; disc before and beyond median band sometimes suffused with whitish; a fine wavy whitish subterminal line; a blackish terminal line; cilia pale fuscous with a darker median line. Hind wings with termen slightly wavy, rounded; fuscous, with numerous fine dark fuscous transverse lines; a wavy whitish line from inner margin at  $\frac{3}{4}$ ; a similar subterminal line; terminal line and cilia as in fore wings.

This appears to be the species described by Mr. Meyrick (P.L.S. N.S.W., 1890, p 853) as *Hydriomena mortuata*, Gn.

Q., Brisbane, Stradbroke Island, Stanthorpe; N.S.W., Sydney. Six specimens.

## 49. EUCYMATOGE MORTUATA.

*Camptogramma mortuata*, Gn. Lep. x., p. 428.

*Cidaria clandestinata*, Wlk. Brit. Mus. Cat., xxv., p. 1408.

There are three specimens in the British Museum without exact locality, which correspond closely to Guenée's description. I hope this species will be re-discovered. It differs from the preceding in the doubly obtuse-toothed projection on postmedian line of fore wing.

## 50. EUCYMATOGE LEUCOPHANES.

*Hydriomena leucophanes*, Meyr. P.L.S. N.S.W., 1890, p. 856.

V., Sale (Lyell); T., Kelso (Lyell), Deloraine.

*Section II.—Hind wings with vein 5 approximated to 6.  
Thorax smooth.*

## 51. EUCYMATOGE GHOSHA.

*Collix ghosha*, Wlk. Brit. Mus. Cat., xxiv., p. 1249.

♀, 25-28 mm. Head, thorax, and abdomen brownish-fuscous. Palpi  $2\frac{1}{2}$ ; ochreous-whitish, apex and middle of second joint blackish. Antennae grey. Legs fuscous; mid-tibiae of ♂ strongly dilated with a deep internal groove. Fore wings with costa gently arched, towards apex strongly arched, termen wavy, strongly bowed, oblique; brownish-fuscous, irrorated with dark fuscous, which tends to form numerous fine, wavy, transverse lines; a conspicuous, blackish, discal dot; a dark fuscous spot in mid-disc at  $\frac{3}{4}$ , followed by a pale spot, this forms part of a more or less obscure pale line from costa at  $\frac{4}{5}$ ; a dark terminal line interrupted on veins; cilia brownish-fuscous. Hind wings with termen crenulate, rounded; colour and markings as fore wings, but discal dot obsolete. Underside of both wings whitish, with very distinct, dark fuscous, discal dots, postmedian and subterminal lines, sometimes interrupted.

Not closely allied to any Australian species.

N.Q., Cooktown, Cairns; Q., Brisbane.

Also from Louisiade Islands, Celebes, Ceylon, and India.

*Section III.—Hind wings with discocellulars angled; vein 5 from nearer 4 than 6. Thorax smooth.*

52. EUCYMATOGE CALLIZONA.

*Hydriomena brujata*, Meyr. P.L.S. N.S.W., 1890, p. 855, *nec* Gn., Lep. x., p. 444.

*H. albimotata*, Meyr. *Ibid, nec* Wlk., Brit. Mus. Cat., xxxv., p. 1689.

*Hydriomena callizona*, Low. Tr.R.S. S.A., 1894, p. 78.

Very variable in the extent of its white marking, the white spot opposite mid-termen appearing to be most constant.

Mr. Meyrick gives an excellent description of this species, but was mistaken in identifying it with those described by Guenée and Walker. Mr. Lower thought his species was different from Meyrick's, but it is the same. His type is probably now in Coll. Rothschild.

N.S.W., Sydney; V., Sale (Lyell); T., Billopp (Lower), Kelso (Lyell).

Genus 13. *Heterochasta*.

*Heterochasta*, Meyr. P.L.S. N.S.W., 1890, p. 808.

Face with slightly projecting scales. Antennae in ♂ shortly ciliated. Palpi rather short, porrected, loosely-scaled. Posterior tibiae with all spurs present. Fore wings in ♂ with tuft of hairs from inner margin near base; areole double. Hind wings in ♂ with vein 4 absent (coincident with 3), 5 nearer 4 than 6 at base, discocellular angled; 6 and 7 stalked; 8 anastomosing with cell to beyond middle.

Type.—*H. conglobata*, Wlk.

1. Fore wings with a white mark on mid-costa - *lasioplaca*  
Fore wings without a white mark on mid-costa - *conglobata*

53. HETEROCHASTA CONGLOBATA.

*Cidaria conglobata*, Wlk. Brit. Mus. Cat., xxv., p. 1411.

*Heterochasta conglobata*, Meyr. P.L.S. N.S.W., 1890, p. 808.

Type in British Museum.

N.S.W., Sydney.

## 54. HETEROCHASTA LASIOPLACA.

*Heterochasta lasioplaca*, Low. P.L.S. N.S.W., 1897, p. 14.

I have taken one ♀ specimen settled on the trunk of *Ficus macrophylla*. It precisely corresponds to the type which is a ♀, though described as ♂. In the absence of the ♂ the generic position of this species cannot be regarded as settled.

Type in Coll. Lower.

Q., Brisbane.

Genus 14. *Polyclysta*.

*Polyclysta*, Gn. Lep. x., p. 375.

Face with small cone of scales. Antennae in ♂ shortly ciliated. Palpi moderate, porrected, loosely-scaled. Posterior tibiae with all spurs present. Fore wings with areole double. Hind wings in ♂ with vein 6 absent (coincident with 7), in ♀ 6 and 7 stalked; 5 from middle of discocellular which is angled; 8 anastomosing with cell to beyond middle.

Type.—*P. hypogrammata*, Gn.

## 55. POLYCLYSTA HYPOGRAMMATA.

*Polyclysta hypogrammata*, Gn. Lep. x., p. 376, pl. xxii, f. 4. Meyr., P.L.S. N.S.W., 1890, p. 809.

Q., Nambour, Brisbane, Mt. Tambourine. N.S.W., Sydney.

Genus 15. *Protaulaca*.

*Protaulaca*, Meyr. P.L.S. N.S.W., 1890, p. 810.

Face with somewhat projecting scales. Antennae in ♂ shortly ciliated. Palpi moderate, porrected, loosely scaled. Posterior tibiae with all spurs present. Fore wings in ♂ beneath with slight groove along vein 1, clothed with rather rough hairs, areole double. Hind wings in ♂ with irregular longitudinal groove above vein 1; veins 3 and 4 from a point or stalked; 5 from middle of discocellular, which is angled; 6 and 7 stalked; 8 anastomosing with cell to beyond middle.

Type.—*P. scythropa*, Meyr.

## 56. PROTAULACA SCYTHROPA.

*Protaulaca scythropa*, Meyr. P.L.S. N.S.W., 1890, p. 810.

Probably attached to *Ficus*.

Type in Coll. Meyrick.

Q., Brisbane; N.S.W., Sydney.

### Genus 16. *Hydriomena*.

*Hydriomena*, Hb. Verz., p. 322.

Face with more or less projecting or loose scales, or with conical tuft. Palpi moderate, porrected, or sub-ascending, rough-scaled. Antennae in ♂ ciliated, rarely dentate or naked. Thorax often crested, glabrous beneath. Abdomen not crested, or with crests on two basal segments only. Posterior tibiae with all spurs present. Fore wings with areole double. Hind wings with 8 anastomosing with cell from near base to beyond middle (Meyrick).

This genus may be divided into two or three sections according to the neuration of the hind wings, two at least of which should, I think, be considered distinct genera. The overwhelming majority of the Australian species belong to the first section, but in a small British collection which I have examined, the majority belong to the second section. The genus is exclusively temperate, only five or six species being known at present to range as far as Southern Queensland. In Tasmania, Victoria, and the mountainous parts of New South Wales, the species are numerous, and no doubt many more will be discovered. For my material I am mostly indebted to Mr. G. Lyell.

As the additions to this genus are comparatively small, I shall not repeat Mr. Meyrick's tabulation (P.L.S. N.S.W., 1890, p. 820), but shall content myself with indicating the affinities of the new species.

*Section I.*—*Hind wings with vein 5 approximated at base to 6.*

#### 57. *HYDRIOMENA PHAEDRA*.

*Hydriomena phaedra*, Meyr. P.L.S. N.S.W., 1890, p. 824.

This species is very variable in the coloration of the median band of fore wings, which sometimes contains a complete, or interrupted, snow-white fascia; sometimes this fascia is suffused with pale fuscous, and sometimes it is dilated so as to occupy most of the median band.

Type in Coll. Meyrick.

Q., Brisbane, Toowoomba; N.S.W., Sydney, Bulli.

58. HYDRIOMENA GYPSOMELA.

*Hydriomena gypsomela*, Low. Tr.R.S. S.A., 1892, p. 11.

Type in Coll. Lower.

V., Kewell; S.A., Adelaide.

59. HYDRIOMENA INTERRUPTATA.

*Cidaria interruptata*, Gn. Lep. x., p. 469, pl. ix., f. 6.

*Hydriomena interruptata*, Meyr. P.L.S. N.S.W., 1890, p. 825.

N.S.W., Bathurst; V., Gisborne; T., locality unspecified.

60. HYDRIOMENA RHYNCHOTA.

*Hydriomena rynchota*, Meyr. P.L.S. N.S.W., 1890, p. 826.

Type in Coll. Meyrick.

N.S.W., Mt. Kosciusko.

61. HYDRIOMENA ACTINIPHA.

*Hydriomena actinipha*, Low. Tr.R.S. S.A., 1902, p. 248.

Fore wings whitish with fuscous markings; a basal and sub-basal transverse line; succeeded by a whitish or pale brownish band; a broad fuscous median band, enclosing a median discal dot, centre of band sometimes paler; several fine wavy transverse lines in band; anterior margin of band strongly concave; posterior margin with a strong median acute projection; both margins outlined in white; the postmedian white line succeeded by a whitish line, both interrupted opposite projection; a fine interrupted blackish terminal line; cilia whitish barred with fuscous. Hind wings pale grey; a fine whitish subterminal line; a fine fuscous terminal line; cilia pale grey.

Type in Coll. Lower.

S.A., Broken Hill.

62. HYDRIOMENA PSARODES, n. sp.

[*ψαρωδης*, greyish.]

♂, 27 mm. Head and face grey, with a few whitish scales. Palpi, 2 $\frac{1}{4}$ ; grey, with a few white scales towards base beneath. Antennae dark fuscous; in male dentate, dentations 1, ciliations 1. Thorax white mixed with dark fuscous. Abdomen whitish mixed



with grey. Legs dark fuscous mixed with whitish; tarsi annulated with whitish; fore wings with costa nearly straight, hind margin rounded, oblique; white mixed with pale greyish; markings dark fuscous; an outwardly curved line near base; median band grey mixed with dark fuscous, and containing a pale central band, in which is a dark fuscous discal dot; internal edge from costa at  $\frac{1}{3}$  to inner margin at  $\frac{1}{3}$ , nearly straight, followed by dark fuscous spots on either margin, and above middle of disc; posterior edge from costa at  $\frac{2}{3}$  to inner margin at  $\frac{2}{3}$ , with a very prominent outward angulation in disc, and preceded by a fine parallel line; a suffused greyish spot on costa before apex; an oblique dark fuscous mark from below apex, ending in a greyish suffusion, which is prolonged to anal angle, and immediately succeeded by a wavy whitish line; a fine, interrupted, blackish, hind-marginal line; cilia barred alternately grey and white. Hind wings grey; a very faint paler subterminal line; a fine, blackish, interrupted terminal line; cilia grey, apices paler. Hind wings beneath grey mixed with whitish, on veins whitish-ochreous; with a discal dot at  $\frac{1}{3}$ , a fine, dentate, fuscous, median line, and a submarginal series of fuscous dots.

In Mr. Meyrick's tabulation this falls with *H. rhynchota*, Meyr., from which it differs in the grey hind wings. It may be distinguished from *H. actinipha*, Low., by the anterior margin of median band of fore wings being nearly straight, not deeply concave.

T., Strahan; one specimen in October (Coll. Lyell).

### 63. HYDRIOMENA LUCIDULATA.

*Cidaria lucidulata*, Wlk. Brit. Mus. Cat., xxv., p. 1407.

*Hydriomena lucidulata*, Meyr. P.L.S. N.S.W., 1890, p. 827.

Type in British Museum.

N.S.W., Blackheath, Mt. Kosciusko; V., Melbourne, Gisborne; T., Deloraine.

### 64. HYDRIOMENA CONIFASCIATA.

*Chrysolarentia conifasciata*, Butl. A.M.N.H., 1882, p. 93.

*Hydriomena conifasciata*, Meyr. P.L.S. N.S.W., 1890, p. 828.

Type in British Museum.

N.S.W., Blackheath; V., Gisborne; T., Hobart.

65. *HYDRIOMENA SUBRECTARIA.*

*Coremia subrectaria*, Gn. Lep. x., p. 411.

*Cidaria responsata*, Wlk. Brit. Mus. Cat., xxv., p. 1409.

*Melanthia casta*, Butl. Cist. Ent., ii., p. 553.

*Hydriomena subrectaria*, Meyr. P.L.S. N.S.W., 1890, p. 829.

Q., Brisbane, Stradbroke I.; N.S.W., Bathurst, Jenolan, Mt. Kosciusko; V., Gisborne, Sale; T. (Guenée); S.A., Mt. Lofty.

66. *HYDRIOMENA PERCRASSATA.*

*Catopyrrha? percrassata*, Wlk. Brit. Mus. Cat., xxiv., p. 1065.

*Xanthorhoe percrassata*, Meyr. P.L.S. N.S.W., 1890, p. 873.

The ♂ antennae are laminate with tufts of cilia as in *H. vacuaria*, Gn.

Type in British Museum.

Q., Brisbane (Wild); V., Melbourne, Gisborne.

67. *HYDRIOMENA ANTHRACINATA.*

*Camptogramma anthracinata*, Gn. Lep. x., p. 425, pl. vii., f. 5.

*Melanodes? atriplena*, Wlk. Brit. Mus. Cat., xxi., p. 325.

*Hydriomena anthracinata*, Meyr. P.L.S. N.S.W., 1890, p. 830.

V., Gisborne, Warragul; T., Launceston, Campbelltown, Hobart.

68. *HYDRIOMENA STRUMOSATA.*

*Coremia strumosata*, Gn. Lep. x., p. 419.

*Cidaria intentata*, Wlk. Brit. Mus. Cat., xxv., p. 1406.

*Cidaria solitata*, Wlk. Brit. Mus. Cat., xxv., p. 1409.

*Hydriomena strumosata*, Meyr. P.L.S. N.S.W., 1890, p. 831.

Q., Daringa? (according to Meyrick, but I think this may be an error); N.S.W., Bathurst, Mt. Kosciusko; V., Gisborne; T., Deloraine, George's Bay, Hobart, Launceston; S.A., Mt. Lofty.

69. HYDRIOMENA VACUARIA.

*Coremia vacuaria*, Gn. Lep. x., p. 418.

*Coremia quartanata*, Gn. Lep. x., p. 419.

*Coremia solutata*, Wlk. Brit. Mus. Cat., xxv., p. 1319.

*Xanthorhoe vacuaria*, Meyr. P.L.S. N.S.W., 1890, p. 866.

*Xanthorhoe paradelpha*, Low. Tr.R.S. S.A., 1892, p. 11.

The ♂ antennae of this species are peculiar, and should lead to its ready recognition in spite of a certain degree of variability. They are laminate rather than pectinate, and appear to me to agree much better with *Hydriomena* than with *Xanthorhoe*. Those of *H. strumosata* are also laminate, though not to the same extent and with shorter cilia.

An examination of the type of *solutata*, Wlk., and a careful consideration of the description of *quartanata*, Gn., have convinced me that they are referable to this species rather than to *strumosata*, Gn.

V., Melbourne, Gisborne, Sale; T., Hobart; S.A., Adelaide, Mt. Lofty.

70. HYDRIOMENA SYMPHONA.

*Hydriomena symphona*, Meyr. P.L.S. N.S.W., 1890, p. 832.

Type in Coll. Meyrick.

N.S.W., Mt. Kosciusko.

71. HYDRIOMENA CATAPHAEA.

*Hydriomena cataphaea*, Meyr. P.L.S. N.S.W., 1890, p. 833.

Type in Coll. Meyrick.

N.S.W., Mt. Kosciusko; V., Mt. Erica.

72. HYDRIOMENA LAMPROTIS.

*Hydriomena lamprotis*, Meyr. P.L.S. N.S.W., 1890, p. 833.

Type in Coll. Meyrick.

N.S.W., Bathurst; V., Melbourne, Gisborne; S.A., Mt. Lofty.

73. HYDRIOMENA EXCENTRATA.

*Coremia excentrata*, Gn. Lep. x., p. 419.

*Cidaria constipata*, Wlk. Brit. Mus. Cat., xxv., p. 1405.

*Cidaria bifusata*, Wlk. Brit. Mus. Cat., xxv., p. 1406.

*Hydriomena constipata*, Meyr. P.L.S. N.S.W., 1890, p. 834.

Mr. Meyrick doubtfully assigns Guenée's *excentrata* to his previously described *strumosata*. From the description it appears to me distinct, and I do not think there is much doubt that it is the present species. Guenée specially directs attention to the brownish hind wings.

Mr. Lyell has taken some fine varieties of this species. Var. a. ♀, from Gisborne, has the median band wholly suffused with dark fuscous. Var. b. ♀, also from Gisborne, has dorsal two-thirds of median band clear white except discal dot and a slight suffusion near external edge.

N.S.W., Bathurst; V., Gisborne.

#### 74. HYDRIOMENA SYNCHORA.

*Hydriomena synchora*, Meyr. P.L.S. N.S.W., 1890, p. 835.

Type in Coll. Meyrick.

T., Hobart.

#### 75. HYDRIOMENA AGLAODES.

*Hydriomena aglaodes*, Meyr. P.L.S. N.S.W., 1890, p. 836.

Type in Coll. Meyrick.

N.S.W., Mt. Kosciusko.

#### 76. HYDRIOMENA CALLIMA, n. sp.

[καλλιμος, beautiful].

♀, 24 mm. Head and palpi dark fuscous mixed with whitish-ochreous. Antennae fuscous. Thorax dark fuscous, irrorated with whitish-ochreous. Legs fuscous, irrorated, and tarsi annulated with pale ochreous. Fore wings triangular, costa slightly arched, termen slightly bowed, slightly oblique; dark fuscous mixed with whitish; basal area suffused with pale brownish; median band bounded by white lines; antemedian line fine, minutely dentate, slightly outwardly curved, from  $\frac{1}{3}$  costa to  $\frac{2}{5}$  dorsum; a small, dark fuscous discal dot, followed by a fine, dentate, dark line from costa beyond middle, lost in disc; post-median white line very conspicuous in costal half, with two fine

dentations beneath costa; dorsal half very slender, followed throughout by an ochreous line; a fine, dark fuscous terminal line; cilia dark fuscous mixed with pale ochreous; apices barred with whitish. Hind wings with termen rounded; orange-yellow; towards base irrorated with fuscous; several short transverse fuscous lines from inner margin; a broad, fuscous, terminal band interrupted in middle; a fine, interrupted, dark fuscous, terminal line; cilia pale ochreous, barred with fuscous. Underside pale ochreous; fore wings with dark fuscous dots on costa at  $\frac{1}{4}$  and middle; broad postmedian and terminal dark fuscous bands, the latter containing a series of whitish dots. Hind wings with discal dot, postmedian and subterminal lines.

Allied to *H. aglaodes*, Meyr.

Type in Coll. Lyell.

T., Strahan, in February. One specimen.

#### 77. HYDRIOMENA IMPERVIATA.

*Larentia imperviata*, Wlk. Brit. Mus. Cat., xxiv., p. 1196.

*Hydriomena imperviata*, Meyr. P.L.S. N.S.W., 1890, p. 837.

Type in British Museum.

V., Gisborne, Kewell, Birchip; S.A., Mt. Lofty.

#### 78. HYDRIOMENA HETEROLEUCA.

*Hydriomena heteroleuca*, Meyr. P.L.S. N.S.W., 1890, p. 837.

Type in Coll. Meyrick.

N.S.W., Mt. Kosciusko; V., Melbourne, Gisborne, Warragul.

#### 79. HYDRIOMENA DOLIOPIS.

*Hydriomena doliopis*, Meyr. P.L.S. N.S.W., 1890, p. 838.

Type in Coll. Meyrick.

S.A., Adelaide, Mt. Lofty.

#### 80. HYDRIOMENA LANGUESCENS.

*Coremia languescens*, Rosen. A.M.N.H., 1885, p. 433, pl. xi., f. 8.

*Hydriomena languescens*, Meyr. P.L.S. N.S.W., 1890, p. 839.  
Type in British Museum.

In Coll. Lyell there is a variety of the ♀ in which the hind wings have no yellow tinge, but are nearly concolorous with the fore wings.

V., Melbourne, Gisborne; T., Hobart.

81. *HYDRIOMENA TRISSOPHRICA*, n sp.

[τρισσοφρικός, three times rippled].

♀, 36 mm. Head and palpi grey; palpi  $2\frac{1}{4}$ . Antennae fuscous. Thorax and abdomen grey, irrorated with whitish. Legs whitish, irrorated with grey; anterior pair fuscous, annulated with ochreous-whitish. Fore wings broadly triangular; costa gently arched; termen slightly bowed, moderately oblique; whitish, partly irrorated with ochreous-whitish, with numerous fine, wavy, dark fuscous, transverse lines; median band whitish, with a small, black, median, discal dot; anterior edge slightly angled outwards in mid-disc, from  $\frac{1}{3}$  costa to  $\frac{2}{5}$  dorsum; outer edge marked by a much waved dark line, somewhat indented beneath costa, with a prominent double median projection, from  $\frac{3}{4}$  costa to  $\frac{3}{4}$  dorsum; preceded by two much waved lines in band; followed towards costa by a whitish mark; a distinct slightly wavy, whitish, subterminal line; an interrupted, fine, blackish, terminal line; cilia grey, apices paler. Hind wings with termen crenulate; whitish-grey, becoming whitish towards costa; three very obscure darker transverse lines from inner margin; an obscure, pale, subterminal line; an interrupted blackish terminal line; cilia whitish, mixed with dark fuscous. Underside whitish; with blackish discal dots and subterminal band on both wings, the latter interrupted in middle; fore wing also with a blackish postmedian band strongly outwardly angled.

Mr. Meyrick's tabulation falls with *H. orthropis*, from which it differs in the whitish median band.

Type in Coll. Lyell.

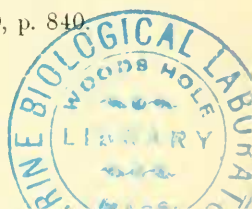
T., Mt. Wellington, in February; one specimen.

82. *HYDRIOMENA ORTHROPIS*.

*Hydriomena orthropis*, Meyr. P.L.S. N.S.W., 1890, p. 840.

Type in Coll. Meyrick.

N.S.W., Mt. Kosciusko.



83. HYDRIOMENA POLYCARPA.

*Hydriomena polycarpa*, Meyr. P.L.S. N.S.W., 1890, p. 841.  
Type in Coll. Meyrick.  
N.S.W., Mt. Kosciusko.

84. HYDRIOMENA OXYGONA.

*Hydriomena oxygona*, Meyr. P.L.S. N.S.W., 1890, p. 842.  
Type in Coll. Meyrick.  
N.S.W., Mt. Kosciusko.

85. HYDRIOMENA STEREOZONA.

*Hydriomena stereozona*, Meyr. P.L.S. N.S.W., 1890, p. 843.  
Type in Coll. Meyrick.  
N.S.W., Mt. Kosciusko ; V., Mt. Erica.

86. HYDRIOMENA CHRYSOCYMA.

*Hydriomena chrysocyma*, Meyr. P.L.S. N.S.W., 1890, p. 843.  
Type in Coll. Meyrick.  
N.S.W., Mt. Kosciusko.

87. HYDRIOMENA PERORNATA.

*Lythria* (?) *perornata*, Wlk. Brit. Mus. Cat., xxiv., p. 1056.  
*Hydriomena perornata*, Meyr. P.L.S. N.S.W., 1890, p. 844.  
Type in British Museum.  
N.S.W., Mt. Kosciusko ; V., Gisborne, Mt. Erica ; T., Mt. Wellington.

88. HYDRIOMENA MECYNATA.

*Camptogramma mecynata*, Gn. Lep. x., p. 424.  
*Camptogramma extraneata*, Wlk. Brit. Mus. Cat., xxvi., p. 1717.  
*Camptogramma annuliferata*, Wlk. Brit. Mus. Cat., xxvi., p. 1717.  
*Hydriomena mecynata*, Meyr. P.L.S. N.S.W., 1890, p. 845.  
N.S.W., Sydney, Bulli, Blackheath ; V., Melbourne, Gisborne, Sale ; T., Launceston, Deloraine, Hobart.

89. HYDRIOMENA LEUCOZONA.

*Hydriomena leucozona*, Meyr. P.L.S. N.S.W., 1890, p. 846.

Type in Coll. Meyrick.

N.S.W., Mt. Kosciusko; V., Gisborne, Ballarat, Phillip Island; T., Launceston, Deloraine.

90. HYDRIOMENA POLYXANTHA.

*Hydriomena polyxantha*, Meyr. P.L.S. N.S.W., 1890, p. 847.

Type in Coll. Meyrick.

N.S.W., Mt. Kosciusko.

91. HYDRIOMENA INSULSATA.

*Camptogramma insulsata*, Gn. Lep. x., p. 423.

*Camptogramma ebuleata*, Gn. Lep. x., p. 424.

*Aspilates spoliata*, Wlk. Brit. Mus. Cat., xxiv., p. 1074.

*Camptogramma correlata*, Wlk. Brit. Mus. Cat., xxv., p. 1330.

*Cidaria fervidata*, Wlk. Brit. Mus. Cat., xxv., p. 1408.

*Hydriomena insulsata*, Meyr. P.L.S. N.S.W., 1890, p. 846.

*Hydriomena correlata*, Meyr. P.L.S. N.S.W., 1890, p. 848.

*Hydriomena ebuleata*, Meyr. P.L.S. N.S.W., 1890, p. 849.

It is with some diffidence that I merge together the three forms distinguished by Meyrick, but I suspect the differences to be only varietal.

N.S.W., Bathurst, Mt. Kosciusko; V., Melbourne, Gisborne, Ballarat; T., Launceston, Deloraine, Campbelltown; S.A., Mt. Lofty, Port Lincoln.

Erroneously referred by Walker to New Zealand.

92. HYDRIOMENA TRYGODES.

*Hydriomena trygodes*, Meyr. P.L.S. N.S.W., 1890, p. 851.

Type in Coll. Meyrick.

V., Gisborne, Melbourne; T., George's Bay.

93. HYDRIOMENA CROCOTA, n. sp.

[*κροκοτος*, saffron coloured].

♂, 26 mm. Head and face purple-reddish, mixed with ochreous. Palpi 2 $\frac{1}{4}$ , purple-reddish. Antennae grey; dentate; dentations 1.



Thorax with a small bifid posterior crest; purple-reddish; in centre ochreous. Abdomen whitish-ochreous mixed with purple-reddish. Legs whitish-ochreous; anterior pair fuscous, annulated with whitish. Fore wings with costa gently arched, termen bowed, oblique; bright ochreous mixed with purple-reddish, which tends to form fine transverse lines; a purple-fuscous basal patch, well marked on margins, but suffused in centre with ground colour; a purple-fuscous median band, containing a faint discal dot, and indications of fine, wavy, reddish-purple, transverse lines; inner edge, from costa at  $\frac{1}{3}$  to inner margin at  $\frac{1}{3}$ , outwardly curved; outer edge from costa at  $\frac{3}{4}$  to inner margin at  $\frac{3}{4}$ , slightly waved above, sinuate towards inner margin; a purple-reddish submarginal suffusion; a purple-fuscous terminal line; cilia purple-reddish. Hind wings pale purplish-grey; posterior third suffused with whitish-ochreous; cilia purple-fuscous; apices reddish.

♀ differs as follows:—Fore wings with ground colour whitish with brown-reddish lines; median band fuscous rather than purple; a fine whitish waved subterminal line preceded by two blackish spots between veins 4 and 6. Hind wings whitish; towards termen purplish tinged; with faint fuscous transverse lines.

Nearest to *H. trygodes*, Meyr., but differs in the brighter and more distinctive colouring. If the two sexes are correctly associated it varies considerably.

V., Wandin South, near Melbourne (♂ type), in September; one specimen in Coll. Lyell; T., Mt. Wellington (♀) in February; one specimen in Coll. Lyell.

#### 94. HYDRIOMENA DECRETA.

*Cidaria decreta*, Wlk. Brit. Mus. Cat., xxxv., p. 1692.

*Hydriomena decreta*, Meyr. P.L.S. N.S.W., 1890, p. 852.

Type in British Museum.

W.A., Geraldton.

#### 95. HYDRIOMENA CRYEROPA.

*Hydriomena cryeropa*, Meyr. P.L.S. N.S.W., 1890, p. 853.

Type in Coll. Meyrick.

N.S.W., Hay; V., Kewell.

## 96. HYDRIOMENA PLAGIOCAUSTA, n. sp.

♂, 30 m.m. Head, palpi, antennae, thorax, and abdomen ochreous-brown. Palpi porrected,  $2\frac{1}{4}$ . Antennal ciliations  $\frac{1}{4}$ . Legs ochreous-fuscous; posterior pair paler. Fore wings triangular; termen waved, bowed, oblique; pale brownish, somewhat ochreous tinged; with numerous fine waved transverse fuscous lines; a short blackish transverse mark from inner margin near base; a conspicuous blackish streak from inner margin at  $\frac{1}{4}$  very obliquely outwards, terminating abruptly in disc at  $\frac{1}{3}$ , beneath middle of costa; a fine blackish line from its extremity to mid-costa; posterior line thickened with blackish scales in second  $\frac{1}{4}$ , and immediately followed for that extent by a whitish line; a little posterior to this is a blackish line which extends obliquely inwards from immediately below apex; a fine blackish terminal line; cilia pale brownish mixed with fuscous. Hind wings with termen crenulate, rounded; pale brownish, towards inner margin with fine transverse fuscous lines, scarcely waved; terminal line and cilia as fore wings. A dull coloured species, easy recognisable by the oblique line on fore wings from inner margin.

T., New Norfolk, near Hobart, two specimens; S.A., Adelaide (Lower).

## 97. HYDRIOMENA SEVERATA.

*Camptogramma severata*, Gn. Lep. x., p. 428.

*Phibalapteryx perfectata*, Wlk. Brit. Mus. Cat., xxv., p. 1341.

*Scotosia scitiferata*, Wlk. Brit. Mus. Cat., xxv., p. 1357.

*Cidaria promptata*, Wlk. Brit. Mus. Cat., xxv., p. 1410.

*Hydriomena severata*, Meyr. P.L.S. N.S.W., 1890, p. 854.

This species has occasionally slight indications of abdominal crests, but these are frequently entirely absent, and are not sufficient to remove it to the genus *Eucymatoge*.

Q., Stradbroke Island; N.S.W., Sydney, Bathurst; V., Melbourne, Gisborne, Sale; T., Campbelltown, Hobart; S.A., Mt. Lofty; W.A., Albany.

98. *HYDRIOMENA ARACHNITIS*, n. sp.

[ἀραχνῆ, a spider].

*Hydriomena arachnitis*, Meyr. M.S.

♀, 22 mm. Head, thorax and abdomen whitish, irrorated with dark fuscous. Palpi 3; whitish, irrorated with dark fuscous; at base white. Antennae grey. Legs fuscous, irrorated with whitish. Fore wings elongate triangular, costa straight, slightly arched towards apex; apex acute, slightly produced, termen wavy, bowed, oblique; whitish-grey, irrorated with dark fuscous, which forms numerous fine wavy obliquely transverse lines; a blackish discal dot; a fine blackish terminal line; cilia whitish, with a median grey line. Hind wings with termen crenulate, only slightly rounded; colour and markings as fore wings, but discal dot obsolete, and lines distinct only towards inner margin.

Readily distinguished from *H. severata* by the longer palpi. It is also not unlike the female of *Melitulias glandulata*, Gn., from which it may be distinguished by the absence of ochreous colouring and dark oblique subapical streak.

V., Gisborne; one specimen in April received from Mr. G. Lyell.

99. *HYDRIOMENA SQUAMULATA*.*Camptogramma squamulata*, Warr. Nov. Zool., 1899, p. 341.

♂ ♀, 18-24 mm. Head and palpi dark fuscous; palpi slender (1-1¼). Antennae fuscous; in ♂ shortly laminate, ciliations ½. Thorax and abdomen dark fuscous, irrorated with grey-whitish. Legs dark fuscous irrorated with grey-whitish. Fore wings with costa gently arched, termen wavy, very slightly sinuate, oblique; dark fuscous mixed with grey-whitish, tending to form numerous obscure fine oblique dark and pale lines; median band usually ill defined; its posterior margin wavy, scarcely angled; sometimes a pale wavy subterminal line; an interrupted blackish terminal line; cilia fuscous; apices paler. Hind wings with termen rounded, wavy, slightly excised between veins 4 and 6; colour and markings as fore wings.

An obscure species. The excision of termen of hind wings appears to be its best characteristic.

Type in Coll. Rothschild.

V., Gisborne, Birchip, in March and July (Lyell); T., Hobart.

100. HYDRIOMENA PLESIA, n. sp.

[πλησιος, neighbouring, akin].

♂ ♀, 20-24 mm. Head dark fuscous. Palpi 2, densely scaled; dark fuscous, bases beneath whitish. Antennae fuscous; in ♂ slightly dentate, ciliations  $\frac{1}{3}$ . Thorax dark fuscous irrorated with grey. Abdomen dark fuscous mixed in ♂ with brownish, in ♀ with grey; a pair of blackish dots on dorsum of each segment. Legs fuscous, irrorated, and tarsi annulated with whitish. Fore wings with costa scarcely arched, termen bowed, wavy, oblique; in ♂ brownish, in ♀ whitish with obscure fuscous oblique lines; a small fuscous basal patch containing obscure darker lines; its margin rounded, oblique from  $\frac{1}{6}$  costa to near base of dorsum; a fuscous median band, in ♀ paler and with oblique fuscous lines, with a blackish median discal dot; anterior edge concave; posterior edge with a projecting tooth beneath costa, and another more prominent in mid-disc, in ♂ with minute white dots on veins; an obscure pale subterminal line in ♂ with minute white dots on veins; an interrupted dark fuscous terminal line; cilia dark fuscous; apices whitish, mixed with fuscous. Hind wings with termen rounded, dentate, fuscous, with obscure fine darker transverse lines; an interrupted blackish terminal line; cilia as fore wings.

In Meyrick's tabulation this falls with *H. rhynchota*, from which it differs in the absence of white fasciae limiting median band of fore wings. At first sight it might be confused with *H. squamulata*, but the palpi, not to mention other points, are very different.

Type in Coll. Lyell.

V., Gisborne, in February and March; three specimens received from Mr. G. Lyell.

101. HYDRIOMENA LOXOCYMA, n. sp.

[λοξοκυμος, obliquely waved].

♀, 20-24 mm. Head dark fuscous, on crown irrorated with whitish. Palpi short ( $1\frac{1}{4}$ ); dark fuscous. Antennae dark

fuscous. Thorax and abdomen dark fuscous, irrorated with whitish. Legs dark fuscous mixed with whitish. Fore wings triangular; costa nearly straight; apex acute; termen bowed, oblique; whitish, with numerous obliquely transverse dark fuscous lines; several fine basal lines; a darker antemedian line from  $\frac{1}{3}$  costa to  $\frac{1}{4}$  dorsum, very slightly outwardly curved; postmedian line very distinct, from  $\frac{2}{3}$  costa to mid-dorsum, with a well marked outward projection beneath costa, and another more obtuse in mid-disc; one or two fine lines in median band; several fine lines follow postmedian; a fine whitish submedian line bordered by grey irroration; an oblique dark shade from apex; an interrupted black terminal line; cilia whitish with a fuscous median line, and barred with fuscous opposite veins. Hind wings with termen rounded; whitish, with suffused transverse fuscous lines, less marked towards base; terminal line and cilia as fore wings. Under side of fore wings fuscous with whitish irroration; of hind wings as upper side, but more distinctly marked.

A small and inconspicuous species, best distinguished by the form of postmedian line of fore wings.

Type in Coll. Lyell.

V., Birchip, in April; three specimens taken by Mr. D. Goudie.

*Section II.—Hind wings with vein 5 not approximated at base to 6.*

(a) *Vein 5 from middle of discocellular, which is straight.*

102. HYDRIOMENA MICROCYMA.

Hydriomena microcyma, Meyr. P.L.S. N.S.W., 1890, p. 840.

Type in Coll. Meyrick.

V., Gisborne; T., Campbelltown, George's Bay; S.A., Mt. Lofty.

(b) *Vein 5 from below middle of discocellular, which is angled.*

103. HYDRIOMENA SUBOCHRARIA.

Aspilates subochraria, Dbl. Dieff., N.Z., ii., 285; Butl., N.Z. Cat., pl. iii., f. 16.

Arsinoe subochraria, Meyr. Tr. N.Z. Inst., 1883, p. 73.

*Camptogramma strangulata*, Gn. Lep. x., p. 423.

*Aspilates euboliaria*, Wlk. Brit. Mus. Cat., xxvi., p. 1684.

*Camptogramma fuscinata*, Gn. Ent. Mo. Mag., v., p. 92.

*Hydriomena subochraria*, Meyr. P.L.S. N.S.W., 1890, p. 851.

Tasmanian specimens are duller in colouration, and more suffused with fuscous than those from other localities.

Q., Toowoomba, Warwick, Stanthorpe; N.S.W., Glen Innes, Ben Lomond (4500 feet), Armidale, Murrurundi, Sydney, Bathurst Cooma; V., Melbourne, Gisborne, Ballarat, Healesville; T., Deloraine, Hobart. Also from New Zealand.

104. *HYDRIOMENA UNCINATA.*

*Camptogramma uncinata*, Gn. Lep. x., p. 424.

*Panagra approximata*, Wlk. Brit. Mus. Cat., xxiii., p. 1002.

*Panagra plurilineata*, Wlk. Brit. Mus. Cat., xxiii., p. 1011.

*Panagra intercalata*, Wlk. Brit. Mus. Cat., xxiii., p. 1012.

*Camptogramma replicata*, Wlk. Brit. Mus. Cat., xxv., p. 1330.

*Panagra revulsaria*, Wlk. Brit. Mus. Cat., xxvi., p. 1665.

*Cidaria gallinata*, F. and R. Reis. Nov., pl. cxxxii., f. 8.

*Hydriomena uncinata*, Meyr. P.L.S. N.S.W., 1890, p. 850.

Q., Mt. Tambourine, Warwick, Stanthorpe; N.S.W., Sydney, Bathurst; V., Melbourne, Gisborne; T., George's Bay, Hobart; S.A., Mt. Lofty; W.A., Albany, Perth, Geraldton.

(Genus 17. *Melitulias.*

*Melitulias*, Meyr. P.L.S. N.S.W., 1890, p. 857.

Face with short cone of projecting scales. Antennae in ♂ ciliated. Palpi moderate, porrected, rough-scaled. Posterior tibiae with all spurs present. Fore wings with areole double. Hind wings in ♂ with a discal patch of modified yellow scales; vein 5 approximated at base to 6, 6 and 7 stalked, 8 anastomosing with cell to beyond middle.

105. *MELITULIAS GRAPHICATA.*

*Tephрина graphicata*, Wlk. Brit. Mus. Cat., xxiii., p. 967.

*Melitulias graphicata*, Meyr. P.L.S. N.S.W., 1890, p. 857.

Type in British Museum.

N.S.W., Blackheath; V., Melbourne; T., Deloraine, Lefroy.

106. MELITULIAS GLANDULATA.

*Phibalapteryx glandulata*, Gu. Lep. x., p. 439, pl. 10, f. 6.  
*Eubolia undulata*, Rosen. A.M.N.H., 1885, p. 432.  
*Melitulias glandulata*, Meyr. P.L.S. N.S.W., 1890, p. 858.  
 V., Melbourne; T., Hobart.

107. MELITULIAS DISCOPHORA.

*Melitulias discophora*, Meyr. P.L.S. N.S.W., 1890, p. 859.  
 Type in Coll. Meyrick.  
 N.S.W., Mt. Kosciusko.

Genus 18. *Anomocentris*.

*Anomocentris*, Meyr. P.L.S. N.S.W., 1890, p. 860.

Face with very small cone of scales. Tongue absent. Palpi short, stout, porrected, rough scaled. Antennae in ♂ bipectinated throughout; pectinations ending in tufts of long cilia. Posterior tibiae in both sexes without median spurs. Fore wings with areole simple. Hind wings with vein 5 approximated at base to 6, 6 and 7 stalked, 8 anastomosing with cell to near end.

Type *A. crystallota*, Meyr.

1. Fore wings with a white longitudinal basal streak - - - - - *crystallota*  
 Fore wings without white basal streak - - *trissodesma*

108. ANOMOCENTRIS TRISSODESMA.

*Anestia trissodesma*, Low. P.L.S. N.S.W., 1897, p. 12.

*Emmilitis trissodesma*, Low. P.L.S. N.S.W., 1899, p. 84.

I have received three ♂ and one ♀ specimens of this interesting species from Mr. Lower. There is no doubt that it is correctly placed in this genus.

Type in Coll. Lower.

S.A., Broken Hill.

109. ANOMOCENTRIS CRYSTALLOTA.

*Anomocentris crystallota*, Meyr. P.L.S. N.S.W., 1890, p. 860.

Type in Coll. Meyrick.

W.A., Carnarvon.

Genus 19. *Diploctena*, nov.

[διπλοκτηνος, with twofold comb; in allusion to the ♂ antennae].

Face with projecting scales. Palpi moderate, porrected, rough scaled. Antennae in ♂ bipectinated, with two pairs of fine pectinations on each segment; extreme apex simple. Thorax not hairy beneath. Posterior tibiae with all spurs present. Fore wings with areole double. Hind wings with vein 5 approximated at base to 6, vein 8 anastomosing with cell from near base to beyond middle.

An endemic development from Xanthorhoe, differing in the ♂ having two pairs of pectinations to each antennal segment. The species are of large size with rather elongate fore wings.

Type *D. argocyma*, n. sp.

1. Fore wings with median band, limited posteriorly  
 by a white fascia - - - - - *argocyma*  
 Fore wings without white fascia - - - - - *nephodes*

110. *DIPLOCTENA ARGOCYMA*, n. sp.

[ἀργυκνυμος, white-waved].

♂, 36 mm. Head, palpi and thorax fuscous mixed with whitish; palpi 1½. Antennae pale grey; in ♂ with two pairs of pectinations on each segment, a shorter proximal pair (2) and a longer distal pair (3), the pectinations being closely approximated at the divisions between the segments. Abdomen whitish, irrorated with fuscous; with pairs of dark dots on dorsum of third and fourth segments. Legs whitish, irrorated with fuscous; anterior pair mostly fuscous; posterior pair mostly whitish. Fore wings rather elongate, triangular; costa, slightly arched; termen slightly bowed, oblique; fuscous mixed with whitish; a darker basal area, outwardly convex; median band darker, containing a median discal dot; anterior edge bounded by a fine outwardly curved whitish line, from ⅓ costa to ⅔ dorsum; posterior edge from ⅔ costa to ¾ dorsum, with a small double-toothed median projection; immediately followed by a wavy white fascia, bisected by a fine fuscous line; a much waved fine white subterminal line; cilia whitish mixed with fuscous (imperfect). Hind wings with



termen rounded; whitish suffused towards inner margin with pale grey; three or four fine wavy fuscous transverse lines from inner margin; a whitish subterminal line; cilia whitish.

Type in Coll. Lyell.

V., Mt. Ellery, in December; one specimen.

### 111. DIPLOCTENA NEPHODES.

*Xanthorhoe nephodes*, Meyr. P.L.S. N.S.W., 1890, p. 874.

♂, 40 mm. Antennae of ♂ bipectinated, with two pairs of pectinations of equal length (3) on each segment, arising from the middle and extreme apex of each segment, and so fairly equidistant. Fore wings elongate triangular; costa nearly straight, except near base and apex; termen rather strongly bowed, oblique; pale grey with dark fuscous lines and irroration; a fuscous suffusion along costa; a basal line slightly outwardly curved; median band narrow, pale except at margins, with a well marked blackish median discal dot; margin defined by a moderately broad dark fuscous line, internally edged with pale brownish, and this again by five fuscous lines; anterior from  $\frac{1}{3}$  costa to near mid-dorsum, nearly straight; posterior from  $\frac{3}{4}$  costa to  $\frac{3}{4}$  dorsum, very slightly angled above middle; a dark outwardly curved slightly waved subterminal line, immediately followed by a whitish line; a fine blackish terminal line, preceded by pale brownish suffusion on veins; cilia grey. Hind wings with termen rounded, whitish-grey; on inner margin and termen suffused with darker grey; a pale subterminal line; a fine blackish terminal line; cilia grey.

Meyrick's type, which I have seen, is considerably wasted. I have, therefore, supplemented his description.

N.S.W., Mt. Kosciusko; V., Yarra track, between Marysville and Wood's Point, in November; one specimen in Coll. Lyell.

### Genus 20. *Xanthorhoe*.

*Xanthorhoe*, Hb. Verz, p. 327.

Face with more or less slightly projecting scales or conical tuft. Palpi moderate, porrected, rough scaled. Antennae in ♂ bipectinated, apex usually simple. Thorax glabrous beneath. Posterior tibiae with all spurs present. Fore wings with areole

double. Hind wings with 8 anastomosing with cell from near base to beyond middle (Meyrick).

As in the case of *Hydriomena*, I think the two sections of this genus should rank as distinct genera. I have merged *Acodia*, Rosen., with the first section for reasons given below.

*Section I.—Hind wings with vein 5 approximated to 6 at base.*

#### 112. XANTHORHOE PAUPER.

*Acodia pauper*, Rosen. A.M.N.H., 1885, p. 435, pl. xi, f. 7; Meyr., P.L.S. N.S.W., 1890, p. 861.

*Xanthorhoe pelochroa*, Low. Tr.R.S. S.A., 1894, p. 80.

This species is somewhat variable in colouration and form of postmedian line of fore wings. The head is sometimes of a very characteristic reddish-violet character. I have examined the neuration of four ♂ specimens. In three the posterior wall and bisecting vein of areole are completely absent, as in the definition of the genus *Acodia*. In the fourth there is a double areole perfectly developed. In view of this variability I think the genus *Acodia* must be dropped. This observation completely confirms Mr. Meyrick's explanation of the nature of this form of abnormal neuration.

Type in British Museum.

V., Fernshaw, Melbourne; T., Ulverstone, Hobart; W.A., Albany, Perth.

#### 113. XANTHORHOE CENTRONEURA.

*Xanthorhoe centroneura*, Meyr. P.L.S. N.S.W., 1890, p. 863.

Type in Coll. Meyrick.

T., Hobart.

#### 114. XANTHORHOE SUBIDARIA.

*Coremia subidaria*, Gn. Lep. x., p. 42.

*Coremia cymaria*, Gn. Lep. x., p. 414.

*Coremia permissata*, Wlk. Brit. Mus. Cat., xxv., p. 1317.

*Coremia regulata*, Wlk. Brit. Mus. Cat., xxv., p. 1318.

*Coremia relictata*, Wlk. Brit. Mus. Cat., xxv., p. 1318.

*Coremia acutata*, Wlk. Brit. Mus. Cat., xxv., p. 1319.

*Cidaria sodaliata*, Wlk. Brit. Mus. Cat., xxv., p. 1410.

*Larentia feraria*, Wlk. Brit. Mus. Cat., xxxv., p. 1672.

*Coremia divisata*, Wlk. Brit. Mus. Cat., xxxv., p. 1682.

*Coremia cristata*, Wlk. Brit. Mus. Cat., xxxv., p. 1683.

*Larentia gelidata*, Wlk. Char. Undescr. Lep., Het., p. 79.

Q., Duaringa, Brisbane, Stradbroke Island, Toowoomba ; N.S.W., Glen Innes, Newcastle, Sydney, Mt. Kosciuszko ; V., Melbourne, Gisborne, Fernshaw ; T., Hobart ; S.A., Mt. Lofty ; W.A., Albany, Perth.

*Var.* ♀ urbana.

N.Q., Townsville, Toowoomba ; Q., Brisbane ; N.S.W., Sydney, T., Hobart.

#### 115. XANTHORHOE HYPERYTHRA.

*Xanthorhoe hyperythra*, Low. Tr.R.S. S.A., 1892, p. 12.

Type in Coll. Lower.

V., Melbourne, Gisborne, Sale ; S.A., Adelaide.

#### 116. XANTHORHOE RHODACRIS.

*Xanthorhoe rhodacris*, Low. Tr.R.S. S.A., 1902, p. 226.

♀ type. Palpi moderate (2). Distinguishable by the reddish ferruginous fore wings, with apical patch of same colour on under side, and the very distinct subterminal lines on both wings. The ♂ is required to establish its generic position.

Type in Coll. Lower.

S.A., Penola.

#### 117. XANTHORHOE AGELASTA, n. sp.

[ἀγελαστος, grave, sombre].

♂, 24 mm. Head and thorax ochreous-whitish. Palpi 2½ ; ochreous-whitish, external surface mixed with fuscous. Antennae pale fuscous ; pectinations 6. Abdomen ochreous-whitish, with paired dark fuscous dots on dorsum of third and fourth segments. Legs ochreous-whitish, irrorated with fuscous ; anterior pair dark fuscous annulated with ochreous-whitish. Fore wings with costa slightly arched, termen almost straight, markedly oblique ; ochreous-whitish with fuscous lines and irroration ; an outwardly curved line near base ; median band darker, except in centre, which contains a blackish discal dot ; band obscurely outlined

with ochreous-whitish, anterior edge concave from  $\frac{1}{3}$  costa to  $\frac{2}{5}$  dorsum, posterior edge with a short obtuse projection above middle, indented above projection, sinuate beneath, from  $\frac{3}{4}$  costa to  $\frac{3}{4}$  dorsum; a short oblique fuscous suffusion beneath apex; a fine pale subterminal line; a fine interrupted blackish terminal line; cilia ochreous-whitish mixed with fuscous (imperfect). Hind wings with termen slightly rounded; ochreous-whitish; a dark fuscous discal dot; a well-marked dark fuscous line from inner margin nearly reaching costa; a fine waved pale subterminal line in a pale fuscous suffusion; cilia ochreous-whitish (imperfect). Underside ochreous-whitish; both wings with well-marked dark fuscous discal dots and postmedian lines, and subterminal fuscous suffusion.

Type in Coll. Lyell.

V., Sale, in March, one specimen; T., Launceston, two specimens, received from Mr. G. Lyell. These latter differ in the transverse line on hind wings, and underside being much more slightly developed, and the underside suffused with fuscous.

#### 118. XANTHORHOE BRUJATA.

*Scotosia brujata*, Gn. Lep. x., p. 444.

*Scotosia repentinata*, Wlk. Brit. Mus. Cat., xxv., p. 1356.

*Scotosia incertata*, Wlk. Brit. Mus. Cat., xxv., p. 1356.

*Tephrosia breviararia*, Wlk. Brit. Mus. Cat., xxxv., p. 1591.

*Xanthorhoe repentinata*, Meyr. P.L.S. N.S.W., 1890, p. 868.

I have no doubt that Guenée's description refers to this species. The short white line immediately following the postmedian line and beneath its projecting angle is well-marked in some specimens though often obsolete, and is very clearly referred to by Guenée. The colouration varies from a reddish-brown, with darker median band, to an almost uniform fuscous.

Q., Duaringa, Brisbane, Toowoomba, Killarney; N.S.W., Newcastle, Sydney, Blackheath, Jenolan; V., Melbourne, Gisborne.

#### 119. XANTHORHOE ANASPILA.

*Xanthorhoe anaspila*, Meyr. P.L.S. N.S.W., 1890, p. 869.

Type in Coll. Meyrick.

N.S.W., Glen Innes, Sydney; V., Gisborne.

120. XANTHORHOE XERODES.

Xanthorhoe xerodes, Meyr. P.L.S. N.S.W., 1890, p. 870.

I have not examined the neuration of this species and so cannot say whether it rightly belongs to this section.

Type in Coll. Meyrick.

V., Melbourne (?) (Lower); W.A., Albany, Perth.

121. XANTHORHOE HELIACARIA.

Coremia heliacaria, Gn. Lep. x., p. 420.

Xanthorhoe heliacaria, Meyr. P.L.S., N.S.W., 1890, p. 872.

V., Sale, Melbourne, Gisborne; T., Hobart; S.A., Mt. Lofty.

122. XANTHORHOE VICISSATA.

Coremia vicissata, Gn. Lep. x., p. 421, pl. ix., f. 5.

Xanthorhoe vicissata, Meyr. P.L.S. N.S.W., 1890, p. 872.

N.S.W., Bathurst; V., Melbourne, Gisborne; T., Hobart; S.A., Mt. Lofty.

*Section II.—Hind wings with vein 5 from below centre of discocellular, which is angled.*

123. XANTHORHOE EPICROSSA.

Xanthorhoe epicrossa, Meyr. P.L.S. N.S.W., 1890, p. 871.

Type in Coll. Meyrick.

N.S.W., Blackheath, Mt. Kosciusko; T., Deloraine, Strahan.

124. XANTHORHOE ARGODESMA.

Xanthorhoe argodesma, Meyr. P.L.S. N.S.W., 1890, p. 867.

I do not know this species and refer it to this section only conjecturally.

Type in Coll. Meyrick.

V., Melbourne, Myrtleford.

125. XANTHORHOE CHEIMATOBIA.

Camptogramma (?) cheimatobiata, Gn. Lep. x., p. 428.

Larentia (?) extensata, Wlk. Brit. Mus. Cat., xxiv., p. 1195.

♂ ♀, 25-28 mm. Head and thorax whitish, mixed with dark fuscous. Face and palpi dark fuscous; palpi  $1\frac{1}{4}$ . Antennae whitish-grey; pectinations 9-10. Abdomen whitish, mixed with dark fuscous, with a double dorsal series of dark dots. Legs dark fuscous annulated with whitish; in posterior pair mostly whitish. Fore wings with costa scarcely arched, termen rounded, oblique; white; with numerous oblique slightly waved dark fuscous lines; a small, dark fuscous basal patch, followed by two or three lines; a median band, mostly fuscous; anterior margin from costa at  $\frac{2}{5}$  to inner margin at  $\frac{2}{5}$ , nearly straight; posterior border from costa at  $\frac{1}{5}$  to inner margin at  $\frac{1}{5}$ , nearly straight; closely followed by a fine parallel line; two well marked subterminal lines, and a well marked submarginal line, all parallel; a very distinct blackish terminal line, interrupted at veins; cilia white, with a few dark fuscous scales. Hind wings white; with four slightly waved dark fuscous transverse lines from inner margin, becoming lost in disc; subterminal, submarginal, terminal lines, and cilia as in fore wings.

Mr. Meyrick was unacquainted with this species.

T., Hobart; V., Mt. Erica (Lyell).

126. XANTHORHOE DASCIA, n. sp.

[*δασκιος*, dark].

*Xanthorhoe extensata*, Meyr. P.L.S. N.S.W., 1890, p. 867; *nec* Wlk., Brit. Mus. Cat., xxiv., p. 1195.

♂ ♀, 22-26 mm. Head blackish, with a few whitish scales on crown. Palpi  $1\frac{1}{4}$ ; blackish. Thorax and abdomen blackish irrorated with whitish. Legs dark fuscous annulated with whitish; posterior pair mostly whitish. Fore wings with costa scarcely arched; termen bowed, oblique; whitish with blackish lines and median band, the dark colour preponderating; an ill-defined dark basal patch; anterior edge of median band from  $\frac{1}{3}$  costa to  $\frac{1}{3}$  dorsum, slightly waved; posterior edge from  $\frac{2}{3}$  costa to  $\frac{2}{3}$  dorsum slightly indented beneath costa, with a short obtuse median projection; followed by several fine parallel dark lines; subterminal line whitish, crenulate; an interrupted black terminal line; cilia whitish, with a blackish median line; apices

barred with dark fuscous. Hind wings with termen rounded; whitish, suffused with dark fuscous; indications of fine dark lines at inner margin; usually a broad dark fuscous terminal band containing a wavy whitish subterminal line; terminal line and cilia as fore wings.

This appears to be the species described by Meyrick as *X. extensata*, Wlk.; probably trusting to Walker's description for identification. I have examined Walker's type, and though it is in poor condition, I satisfied myself that it is referable to the preceding species.

Type in Coll. Lyell.

Var. *petrodes* [*πετροδης*, resembling a rock]. Fore wings grey rather than blackish, with pale ochreous-brown suffusion near base and in parts of disc.

Q., Warwick, in April. Four ♂ specimens of the variety *petrodes*, harmonising in colouration with the rocks on which they settled. N.S.W., Bathurst; V., Melbourne, Fernshaw, Gisborne, in March and April; four specimens received from Mr. G. Lyell. S.A., Mt. Lofty.

#### 127. XANTHORHOE XANTHOSPILA.

*Xanthorhoe xanthospila*, Low. Tr.R.S. S.A., 1892, p. 13.

♂ ♀, 22-24 mm. Head whitish-ochreous, with a few fuscous scales. Face and palpi dark fuscous with a few whitish-ochreous scales; palpi  $1\frac{1}{4}$ . Antennae whitish-grey; pectinations 6. Thorax dark fuscous; anterior edge whitish-ochreous; patagia whitish-ochreous, with a blackish transverse line. Abdomen whitish-ochreous, mixed with fuscous; with a double dorsal series of dark dots. Legs dark fuscous annulated with ochreous-whitish; posterior pair ochreous-whitish irrorated with dark fuscous. Fore wings with costa slightly arched, termen slightly bowed, oblique; dark fuscous mixed with whitish and with ochreous on veins; basal line obscure, outwardly curved, oblique; median band darker, except in centre, which contains a blackish discal dot; anterior edge, from costa at  $\frac{1}{3}$  to inner margin at  $\frac{1}{4}$ , obscurely outlined with whitish, above nearly straight, beneath strongly curved inwards; posterior edge sharply defined, bounded by a double whitish line, from costa at  $\frac{3}{4}$  to inner margin at  $\frac{3}{4}$ , with a sharp median projection, indented above and below

projection; an interrupted whitish waved subterminal line; an interrupted blackish terminal line, thickened between interruptions; cilia fuscous mixed with pale ochreous; apices whitish. Hind wings with termen slightly rounded; whitish suffused with grey; with a dark fuscous discal dot, and an interrupted dark fuscous hind marginal line; cilia whitish mixed with grey.

Type in Coll. Lower.

V., Gisborne, Kewell, Birchip; S.A., Mt. Lofty.

### Genus 21. *Dasysterna*, nov.

[*δασυστερνος*, hairy-breasted].

Face with long projecting hairs. Tongue present. Antennae of ♂ ciliated. Palpi rather long, second joint ascending, terminal joint porrect, clothed with long stiff hairs in front. Thorax and coxae densely hairy beneath. Posterior tibiae with all spurs present. Fore wings with areole single. Hind wings with vein 5 from slightly above middle of cell, 6 and 7 stalked, 8 anastomosing with cell to beyond middle.

Type *D. tristis*, Butl.

Closely allied to *Dasyuris*, Gn., of which it is a development; these two genera, with the New Zealand *Notoreas*, Meyr., and the New Zealand and European *Lythria*, Hb., form a natural and probably archaic group.

#### 128. *DASYSTERNA TRISTIS*.

*Phytometra tristis*, Butl. A.M.N.H., 1882, p. 90.

*Scordylia tristis*, Meyr. P.L.S. N.S.W., 1890, p. 819.

Type in British Museum.

Mr. Meyrick overlooked the hairy underside of this species; probably in his specimens it was denuded. Mr. Butler made a less excusable error in describing it as a Noctuid.

V., Melbourne, Kewell, Nhill.

### Genus 22. *Dasyuris*.

*Dasyuris*, Gn.

Face rough-haired or with projecting scales. Palpi moderate, porrected, with long dense rough hairs. Antennae in ♂ shortly



ciliated. Thorax and coxae densely hairy beneath. Posterior tibiae with all spurs present. Fore wings with areole double. Hind wings with 8 anastomosing with cell from near base to beyond middle (Meyrick).

Besides the Australian and New Zealand species there is one European.

- |    |  |   |   |            |   |
|----|--|---|---|------------|---|
| 1. | Hind wings with yellow markings            | - | - | -          | 2 |
|    | Hind wings without yellow markings         | - | - | -          | 3 |
| 2. | Fore wings with postmedian line angled     | - | - | euclidiata |   |
|    | Fore wings with postmedian line not angled | - | - | hedylepta  |   |
| 3. | Hind wings with postmedian line angled     | - | - | decisaria  |   |
|    | Hind wings with postmedian line not angled | - | - | caesia     |   |

#### 129. DASYURIS DECISARIA.

*Fidonia decisaria*, Wlk. Brit. Mus. Cat., xxvi., p. 1671.

*Dasyuris decisaria*, Meyr. P.L.S. N.S.W., 1890, p. 875.

Type in British Museum.

V., Melbourne, Gisborne; T., Launceston, Mt. Wellington.

#### 130. DASYURIS CAESIA, n. sp.

[*Caesius*, grey].

♀, 22 mm. Head and palpi fuscous mixed with whitish-grey; palpi  $2\frac{3}{4}$ . Antennae grey. Thorax and abdomen grey irrorated with whitish. Legs grey irrorated with whitish. Fore wings elongate-triangular; costa almost straight; termen strongly bowed, slightly oblique; whitish with grey markings and irroration; a transverse line near base; antemedian line well marked, outwardly curved, from  $\frac{1}{3}$  costa to  $\frac{2}{5}$  dorsum; a faint median shade preceded by a discal dot; postmedian line very distinct from  $\frac{2}{5}$  costa to  $\frac{3}{4}$  dorsum, somewhat wavy, with a slight bidentate median projection; terminal area suffusedly darker, with a fine wavy subterminal line; an interrupted dark fuscous fine terminal line; cilia grey, sharply barred with whitish. Hind wings with termen rounded; whitish-grey, with a broad dark grey terminal band; postmedian line faintly marked, not angulated; subterminal and terminal lines and cilia as fore wings.

Closely allied to *D. decisaria*, Wlk.; but the fore wings are narrower and much paler, the postmedian line with median

projection less marked, and the hind wings have termen not wavy, and the postmedian line not angled.

Type in Coll. Lyell.

V., Kewell, in October. One specimen taken by Mr. J. R. Hill.

### 131. DASYURIS EUCLIDIATA.

*Coremia euclidiata*, Gn. Lep. x., p. 420.

*Coremia glypticata*, Gn. Lep. x., p. 420.

*Dasyuris euclidiata*, Meyr. P.L.S. N.S.W., 1890, p. 876.

Q., Warwick. I found this species abundant in October, flying actively in the bright sunshine, attracted by the flowers of *Galium*.

V., Melbourne, Gisborne.

### 132. DASYURIS HEDYLEPTA, n. sp.

[ἡδυλεπτος, taken with pleasure].

♂ ♀, 32-36 mm. Head dark fuscous with a few whitish scales. Palpi dark fuscous mixed with ochreous-whitish, which preponderates towards base. Antennae dark fuscous; in ♂ dentate and shortly ciliated ( $\frac{1}{2}$ ). Thorax and abdomen dark fuscous irrorated with whitish-ochreous. Legs dark fuscous mixed with ochreous-whitish; posterior pair paler. Fore wings triangular, costa slightly arched, termen moderately bowed, slightly oblique; fuscous mixed with whitish; an obscure dark transverse line near base, edged posteriorly by a whitish line; antemedian line white, twice dentate, from  $\frac{1}{3}$  costa to  $\frac{1}{3}$  dorsum, posteriorly edged with dark fuscous; a slightly curved dark fuscous line sometimes follows this before mid-disc; a blackish discal dot; postmedian line fine, blackish, outwardly curved, with rounded teeth, from  $\frac{3}{4}$  costa to  $\frac{3}{4}$  dorsum, edged posteriorly by a white line; this is sometimes preceded by a fine outwardly curved fuscous line from  $\frac{2}{3}$  costa to  $\frac{2}{3}$  dorsum; a fine wavy, whitish subterminal line; a fine interrupted blackish terminal line; cilia fuscous, apices barred with whitish. Hind wings with termen rounded; fuscous; basal part of disc more or less suffused with bright ochreous; a wavy bright ochreous subterminal line; terminal line scarcely traceable; cilia as in fore wings,

but at apex wholly whitish. Under surface of both wings ochreous; bases irrorated with fuscous; discal dot and post-median line dark fuscous; suffused fuscous subterminal and terminal lines, both interrupted in middle.

Type in Coll. Lyell.

V., Mount Erica (4500 feet), in February; five specimens.

## APPENDIX.

### Genus 23. *Cleptocosmia*.

*Cleptocosmia*, Warr. Nov. Zool., 1896, p. 383.

Fore wings with basal half clothed with long hairs, veins 7, 8, 9, 10 and 11 stalked, no areole. Hind wings with veins 3 and 4 stalked, 6 and 7 stalked, 8 anastomosing with cell as far as middle. Hind tibiae with middle spurs absent.

I examined the néuration of the type and it is certainly very aberrant in this family, but Hampson records similar absence of the areole in several Indian genera. Perhaps the genus may be distantly related to *Astheria*, but further examination of more abundant material is necessary to form an opinion.

Type *Cleptocosmia mutabilis*, Warr.

### 133. *CLEPTOCOSMIA MUTABILIS*.

*Cleptocosmia mutabilis*, Warr. Nov. Zool., 1896, p. 383.

Type in Coll. Rothschild.

N.Q., Cooktown.

### SPECIES UNRECOGNISED, OR NOT RIGHTLY INCLUDED IN THIS SUB-FAMILY.

134. *Melanippe icterata*, Gn. Lep. x., p. 387, pl. ix., f. 9. Said to be from New Holland. Mr. Meyrick believes the locality to be erroneous.
135. *Coremia extraneata*, Gn. Lep. x., p. 416. A species of unknown locality, conjecturally referred by the author to Australia.
136. *Coremia opertaria*, Gn. Lep. x., p. 421. From Australia. Unknown to me.

137. *Camptogramma bichromata*, Gn. Lep. x., p. 425. From Tasmania. Unknown to me.
138. *Larentia* (?) *intenebrata*, Wlk. Brit. Mus. Cat., xxiv., p. 1196. I did not see any type in the British Museum, and without a type this species cannot be safely conjectured.
139. *Coremia ordinaria*, Wlk. Brit. Mus. Cat., xxv., p. 1320. From Tasmania. Unknown to me. I did not see any type.
140. *Phibalapteryx strixata*, Wlk. Brit. Mus. Cat., xxv., p. 1341. From Sydney. I saw no type. Belongs to the genus *Selidosema*: *cheluta*, Meyr., is a synonym. (*Selidoseminae*).
141. *Scotosia fractata*, Wlk. Brit. Mus. Cat., xxv., p. 1359, is a synonym of *Selidosema euboliaria*, Wlk. (*Selidoseminae*).
142. *Cidaria assimilata*, Wlk. Brit. Mus. Cat., xxv., p. 1408. From Swan River. Unknown to me.
143. *Panagra multifilaria*, Wlk. Brit. Mus. Cat., xxvi., p. 1664. From Tasmania. According to Swinhoe (*Cat. Oxf. Mus.*, ii., p. 356) the type is in the Oxford Museum, and is referable to the genus *Asthena*.
144. *Melanippe teliferata*, Wlk. Brit. Mus. Cat., xxvi., p. 1712, is a synonym of *Satraparchis bijugata*, Wlk. (*Monoctenianae*).
145. *Scotosia metarhodata*, Wlk. Brit. Mus. Cat., xxvi., p. 1724. Belongs to the genus *Pseudoterpna* (*Geometrinae*).
146. *Cidaria metaxanthata*, Wlk. Brit. Mus. Cat., xxvi., p. 1734, is a synonym for *Dichromodes ainaria*, Gn. (*Monoctenianae*).
147. *Eubolia indicataria*, Wlk. Brit. Mus. Cat., xxxv., p. 1698. Belongs to the genus *Dichromodes* (*Monoctenianae*).
148. *Eubolia partitaria*, Wlk. Brit. Mus. Cat., xxxv., p. 1699, also belongs to the genus *Dichromodes*.
149. *Collix multifilata*, Warr. Nov. Zool., 1896, p. 385.
150. *Rhinoprora pallidiplaga*, Warr. Nov. Zool., 1898, p. 25. From Duaringa. I did not identify the type, which is without hind legs, but is probably a *Chloroclystis* near *euryzona*, but with hind wings wholly fuscous.
151. *Megatheca dentosa*, Warr. Nov. Zool., 1901, p. 31. From Mackay. This is a *Chloroclystis* which I failed to

identify, allied to euryzona. Sir G. Hampson informs me that it is identical with tenuilinea, Warr., from Pulo Laut.

152. *Mesoptila anthracias*, Low. P.L.S. N.S.W., 1897, p. 12. This belongs to the Noctuidae, and is allied to the genus *Panilla*. I am indebted to Miss Wise, of Sale, for allowing me to examine the type.
153. *Xanthorhoe lychnota*, Low. P.L.S. N.S.W., 1900, p. 404. The type of this belongs to the Selidoseminae.
154. *Epirrhoë bertha*, Swin. Tr.E.S., 1902, p. 648. From Hobart. "Allied to *E. scotodes*, Turn." This and the following recently described species are unknown to me.
155. *Epirrhoë maerens*, Swin. Tr.E.S., 1902, p. 648. From Mt. Kosciusko.
156. *Dasyuris tridenta*, Swin. Tr.E.S., 1902, p. 649. From Geraldton, W.A.
157. *Microdes arcuata*, Swin. Tr.E.S., 1902, p. 652. From "S.E. Australia."

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